COLLEGE HOUSING ADMINISTRATORS' PERCEPTIONS OF DECISION MAKING: AN APPLICATION OF THE VROOM-YETTON MODEL

BY

EUGENE I. LUNA III

A DISSERTATION PRESENTED TO THE GRADUATE SCHOOL OF
THE UNIVERSITY OF FLORIDA
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE
DEGREE OF DOCTOR OF PHILOSOPHY

UNIVERSITY OF FLORIDA

1990

UNIVERSITY OF FLORIDA LIBRARIES

ACKNOWLEDGEMENTS

There are many people who own a part of this dissertation, due to their support and encouragement for my work. While there are too many to name here, several persons are deserving of special recognition.

First and foremost, my deepest gratitude goes to my wife, Shelia. She has given so much during these doctoral years, including time we might have had together, two pregnancies, two healthy daughters, the primary parenting role, her support, her encouragement, her confidence, and most importantly, her love. I am forever grateful for her sacrifices.

A most sincere appreciation goes to Dr. James Wattenbarger, chairperson of my committee, for his consistently student-centered approach to my graduate studies and to Dr. James Pitts for his support and advice during the work on my dissertation. To Dr. Art Sandeen, I offer my heartfelt thanks for his confidence, his enthusiastic support, his advice, and our relationship.

My appreciation also is extended to Jim Grimm and Jack Worley, who have guided my work while keeping me focused on this project. They have both been sources of strength and self-confidence for me during my tenure in the Division of Housing at the University of Florida. A special thanks is offered to Dr. Ken Portier and his assistant, Guari Datta, for their assistance with the analysis of the data. Dr. Portier

gave of his time and patience to guide me through the maze of statistics necessary to complete this project.

Linda Murray deserves my gratitude and much more for her patience, positive attitude, and support during the typing and formatting of this document. I also appreciate the support and encouragement which I received from my staff and colleagues at both the University of Florida and The University of Georgia during this project. In particular, I want to thank Dr. Dan Hallenbeck for his support and encouragement.

I wish to express my appreciation to Roanoke College and its staff for their patience and perseverance with me as an undergraduate. Charles Moir believed in me and supported me through my four years at Roanoke, and I am truly grateful to him for that opportunity.

Lastly, I want to thank my mother, Martha Thacker Luna, and my sisters, Jane Campbell and Judi Henson, who led me to believe that getting a Ph.D. was a natural thing for me to do even though no one in the family had done so. A special recognition also goes to my late father, Eugene Irving Luna, Jr., who would never let me settle for mediocrity and who maintained high expectations for all that I did.

TABLE OF CONTENTS

page

ACKNOWLEDGEMENTS ii

LIST OF TABLES iv

ABSTRACT vii

CHAPTERS

I DESCRIPTION OF THE STUDY 1

- Introduction 1
- Statement of the Problem 3
- Theoretical Background 4
- Importance of the Study 5
  - Delimitations 6
  - Definition of Terms 6
- Overview of Methodology for the Study 7
  - Selection of the Population and Sample 7
  - Instrumentation 8
  - Data Collection 9
  - Analysis of the Data 9
- Overview of the Study 11

II REVIEW OF THE LITERATURE 12

- College and University Housing 12
- Administration and Decision Making 15
- Vroom-Yetton Model 19

III RESEARCH METHODOLOGY 24

- Purpose of the Research 24
- Population and Sample 25
- Instrumentation 25
  - Developing Hypothetical Problems 25
  - Validity of the Hypothetical Problems 26
  - Validity of the Response Alternatives 27
  - Pilot Study 28
- Administration of the Instrument 28
- Treatment of the Obtained Data 29
- Summary 30

page

IV PRESENTATION AND ANALYSIS OF THE DATA................. 32

Research Sample.. 32
Analysis of the Data................................... 33
Effect of Information Needs on Decision Behavior... 41
Effect of Subordinates' Acceptance of the Decision. 44
Effect of Goal Congruence.......................... 46
Effect of Subordinate Conflict on Decision Behavior 47
Effect of Gender on Decision Behavior.............. 49
Effect of Experience on Decision Behavior.......... 52
Summary.. 54

V SUMMARY AND CONCLUSIONS............................... 59

Overview of the Research............................... 59
Major Findings of the Research......................... 61
Conclusions and Discussion............................. 66
Implications for the Future............................ 69

APPENDICES

A INSTRUMENT USED TO GATHER DATA........................ 73

B COVER MEMORANDUM TO PILOT STUDY PARTICIPANTS.......... 83

C QUESTIONNAIRE FOR PILOT STUDY PARTICIPANTS............ 84

D RESEARCHER'S INTRODUCTORY LETTER TO STUDY SAMPLE...... 85

E INTRODUCTORY ENDORSEMENT LETTER....................... 86

F COVER LETTER FROM INSTITUTE OF HIGHER EDUCATION....... 87

G COVER LETTER TO CHIEF HOUSING OFFICERS................ 88

H VARIABLES OF VROOM-YETTON DECISION MODEL.............. 89

I CODED PROBLEMS FROM INSTRUMENT WITH MODEL'S PRESCRIPTION.................................... 90

J FOLLOW-UP LETTER TO NONRESPONDING STUDY SAMPLE........ 94

REFERENCES.. 95

BIOGRAPHICAL SKETCH... 100

LIST OF TABLES

Table page

4-1 Frequency Distribution by Gender, Experience, Institution, and Number of Bedspaces..................... 34

4-2 Frequency and Percentage of Model Matched Responses for Each Problem and Average Decision Behavior Score..... 35

4-3 Analysis of Variance--Full Model............................. 40

4-4 Analysis of Variance--Reduced Model......................... 42

4-5 One-Way Analysis of Variance for Information Effect......... 43

4-6 One-Way Analysis of Variance for Acceptance Effect.......... 45

4-7 One-Way Analysis of Variance for Conflict Effect............ 48

4-8 Analysis of Variance--Main Effects Model for Females........ 50

4-9 Analysis of Variance--Main Effects Model for Males.......... 51

4-10 Analysis of Variance--Five Years or Less Experience......... 53

4-11 Analysis of Variance--More Than Five Years Experience....... 55

Abstract of Dissertation Presented to the Graduate School
of the University of Florida in Partial Fulfillment of
the Requirements for the Degree of Doctor of Philosophy

COLLEGE HOUSING ADMINISTRATORS' PERCEPTIONS OF DECISION MAKING: AN APPLICATION OF THE VROOM-YETTON MODEL

by

Eugene I. Luna III

August, 1990

Chairman: James L. Wattenbarger
Cochairman: C. Arthur Sandeen
Major Department: Educational Leadership

The purpose of this study was to determine if the decision making model developed by Vroom and Yetton describes the manner in which college housing administrators perceive they would involve their subordinates in making decisions.

To accomplish this purpose, an instrument was developed by this researcher. The instrument was developed according to a design previously validated by Jago and recognized by Vroom. The instrument consisted of 32 hypothetical problems, each of which included a unique combination of the situational factors Vroom and Yetton indicated were significant in determining the appropriate level of subordinate participation in the decision making process. Following each problem, the five decision behaviors prescribed by the model were listed for choice by the respondents.

The instrument was mailed to a 25% randomly selected group of chief housing officers in the United States who were listed in the Association of College and University Housing Officers -

International membership directory. The research sample totaled 139 chief housing officers.

The data were analyzed using analysis of variance procedures. Where significant effects were indicated by the full model analysis of variance, a reduced model of analysis of variance was used. Further analyses using t-tests were conducted to determine differences in levels of a single factor.

The results of the study indicated that the Vroom-Yetton model does not fully describe the manner in which chief housing administrators perceive their involvement of subordinates in making decisions. However, the findings indicated three of the four factors in the model significantly affected the choice of decision behavior selected by the respondents.

Although there was no evidence of any interactive effect among any of the model's situational factors, those related to information needs, decision acceptance, and subordinate conflict appeared to independently affect the manner in which chief housing officers viewed involvement of their subordinates in making decisions. The factor of goal congruence did not appear to affect the chief housing administrator's choice of decision behavior.

The test for differences between male and female administrators and between those having more experience than others indicated there were no differences due to gender or experience.

CHAPTER I
DESCRIPTION OF THE STUDY

Introduction

Higher education in the United States has grown dramatically during the last four decades. With over 3,000 colleges and universities, it is the largest and most complex system of its kind in the world. Accompanying the growth in size and number of institutions since World War II has been a parallel expansion and evolution of a variety of organizational structures and administrative staffs to serve the needs of those seeking higher education.

To meet the needs of increasing numbers of students, administrative roles in academic, student, and business affairs became more specialized. In student affairs, the functional areas of placement, health services, personal counseling, financial aid, and student housing grew significantly to include larger staffs and expanded roles (Fenske, 1980). These student affairs functions required administrators with specialized knowledge as well as broad managerial competence to direct the resources and staffs under their supervision. Today, the student affairs administrator is called upon to provide leadership and skilled management in a complex organizational environment.

The campus housing officer, in particular, performs his/her administrative duties in a specialized environment. Housing administrators, by the nature of their function, are concerned with student life on a 24-hour per day basis. The importance of campus housing is underscored by research that indicates students who live in campus housing are more likely to persist in college, to participate in extracurricular activities, and to express satisfaction with their undergraduate experience than students who live off campus (Astin, 1985). Furthermore, the administration of campus housing requires decisions that have both immediate and long-range impacts on student life. Campus housing requires the effective administration of financial affairs, facility management, student development, crisis control, and strategic planning.

Decision making is a major responsibility of higher education administrators, including those responsible for campus housing departments. Griffiths (1959) suggested that decision making is the central activity of administration and the most important function of administrators. The administrative process has been commonly viewed as consisting of decision making, planning, resource allocation, staff motivation, and program evaluation (Kimbrough & Nunnery, 1983). Clearly, decision making skills are critical to the success of higher education administrators.

The literature on administration reflects considerable interest in the subject of administrative decision making (Heller & Yukl, 1969). Of particular interest is the issue of participation in the decision making process. Some theorists suggest subordinate participation in decision making will result in more effective decisions in most situations (Blake & Mouton, 1962; Likert, 1977; McGregor, 1966; Maier & Solem, 1952). Others suggest that different circumstances call for varied degrees of participation in the decision making process (Fiedler, 1967; Hersey & Blanchard, 1977; House, 1971; Vroom & Yetton, 1973). In some circumstances, participation seems to result in more effective decisions, although in others, increased participation in the decision making process appears to have negative consequences for decisions made (Bass, 1981).

Participation in the decision making process may refer to the manner in which a leader and subordinate(s) share influence in arriving at a decision. It may also refer to the degree to which subordinates are involved in the decision making process. For the purposes of this study, participation will refer to the latter.

Statement of the Problem

The purpose of this study was to determine if the decision making model developed by Vroom and Yetton describes the manner in which college housing administrators perceive they would involve their subordinates in making decisions. The study examined whether a college housing administrator's self-report of decision behavior is affected by (a) the information needs of a situation; (b) whether employees will accept and support the final decision; (c) the extent of goal congruence between the organization and employees in solving a problem; and (d) the likelihood of conflict among employees in considering alternative decisions.

In order to determine whether the Vroom-Yetton model of decision making describes the way college and university administrators determine the level of involvement employees will have in solving problems, the following null hypotheses were tested.

Hypothesis 1. The location and availability of information needed to solve a problem have no effect on an administrator's choice of decision making behavior.

Hypothesis 2. The importance of subordinates' acceptance of a decision and the likelihood of subordinates accepting an autocratic decision have no effect on an administrator's choice of decision making behavior.

Hypothesis 3. Congruence between the subordinates' goals and the organization's goals relative to a particular problem has no effect on an administrator's choice of decision making behavior.

Hypothesis 4. The likelihood of conflict among subordinates over proposed alternative solutions to a problem has no effect on an administrator's choice of decision making behavior.

With all hypotheses, a level of .05 was used to test for statistical significance. If a probability value of less than .05 was indicated, the null hypothesis was rejected.

Theoretical Background

Vroom and Yetton (1973) developed a model of decision making which prescribes the degree of subordinate participation in the decision making process appropriate for a given situation. The model is designed to protect the quality of the decision itself, while considering the need for subordinate acceptance of the decision to insure its effective implementation.

Decision making behaviors ranging on a continuum from autocratic to consultative to group participation are prescribed by the model. These prescriptive decision processes are based on the interaction of specific variables related to the quality of the decision and the likelihood of subordinates' acceptance and support of it.

Maier and Verser (1982) suggested that effective decisions are a product of the degree to which the decision has quality and acceptance. In their equation, quality relates to the objectivity of the facts in a given situation, while acceptance relates to the feelings of the persons who must implement the decision. Vroom and Yetton, building on the earlier work of Maier, have found that decision behavior that followed the prescriptions of their model was judged to be more effective than decision behavior that did not follow the prescriptions (Bass, 1981).

The model has not been tested with campus housing administrators. If it accurately describes the manner in which these administrators make decisions, it will help campus housing administrators understand the contingencies that call for varying degrees of subordinate participation in decision making. This should lead to more effective decisions by these administrators.

Importance of the Study

With the expansion of higher education and the increasing complexity of administration, it is important to understand the conditions under which subordinates' participation in decision making may contribute to more effective administration. College housing administrators may benefit from a model to use in determining how to involve their employees in decision making. The Vroom-Yetton model has had useful applications in other organizational settings. If the model is confirmed by this study of college housing administrators, the effectiveness of their decisions may be improved by applying the prescriptive principles of the model.

Delimitations

1. Only persons serving as chief housing officers were included in the population.
2. The situations that were used in the instrument were hypothetical and non-specific; thus these situations may not have represented the full range of situations for which housing administrators make decisions nor even reflect their behavior in particular situations.
3. Only the problem attributes described by Vroom and Yetton were considered as variables in the choice of decision behaviors.
4. This study was limited to the application of the Vroom-Yetton decision model to group problems.
5. This study was limited to problems that have a quality requirement.

Definition of Terms

The following terms are defined for the purposes of this study and to assist the reader.

The chief housing officer is the college or university administrator whose main responsibility is to oversee the operation of programs, services, and staff in the department of campus student housing.

A decision is a choice of action to be taken in response to an organizational situation.

Decision acceptance is a "commitment on the part of subordinates for the effective implementation of the decision" (Vroom & Yetton, 1973, p. 26).

Participation is "the half of the continuum of decision making in which subordinates are involved in some way in the decision process" (Bass, 1981, p. 310).

An autocratic decision is a decision made by an administrator in which the subordinates had little, if any, influence.

A problem is a set of circumstances that require a decision to be made in an organization.

A group problem is a problem that involves an entire staff or some subset of it (Vroom & Yetton, 1973).

Overview of Methodology for the Study

The purpose of this study, as indicated earlier, was to test whether the Vroom-Yetton model of decision making described the way college housing administrators perceive they would involve their employees in making decisions. In addition, the study was designed to determine if these administrators' choice of decision making behavior was significantly affected by the location and accessibility of information needed to make a quality decision, the level of goal congruence between their employees and the organization in a given situation, the likelihood of conflict among employees regarding proposed alternatives to a given situation, or the importance of employee acceptance of a decision for a given problem.

Selection of the Population and Sample

The population for this study included all chief housing officers at four-year colleges or universities in the United States who were members of the Association of College and University Housing Officers - International (ACUHO-I) in 1988.

A computer assisted random sample equal to 25% of the ACUHO-I membership was used to designate the research sample and determine which chief housing officers would receive the "Decision Styles Inventory."

Instrumentation

A set of 32 hypothetical problems, each of which included the model's situational attributes, was developed by the researcher. These hypothetical problems represented all combinations of the situational factors for which the model would prescribe elimination of one or more of five decision behaviors. Using these problems, an instrument was developed (Appendix A) that included each of the problems followed by a list of the five possible decision making behaviors described by the model. The respondents were asked to read each problem and choose the decision making behavior that described the way they would make a decision to solve that problem.

A pilot test of the instrument was conducted to determine the clarity of instructions and scenario descriptions and to determine the approximate amount of time needed to complete the instrument. The participants in the pilot study were sent a memorandum (Appendix B) explaining the purpose of the pilot study. After completing the instrument, they were asked to complete a questionnaire (Appendix C) regarding aspects of the instrument and the study. The participants were college housing administrators with a minimum of five years experience in the college housing field.

Data Collection

A total of 139 housing administrators were included in this study. Prior to mailing the instrument to the research sample, introductory letters from this researcher (Appendix D) and from the chairperson of the ACUHO-I Research and Information Committee (Appendix E) were mailed to all chief housing officers in the sample to explain the project. A few days after mailing the introductory letter, the instrument was mailed to each subject in the sample, along with cover letters from James L. Wattenbarger, Director of the Institute for Higher Education at the University of Florida (Appendix F), James C. Grimm, Director of Housing at the University of Florida, and this researcher (Appendix G). The letters gave an explanation of the study and stressed the importance of returning a completed instrument. A self-addressed, stamped envelope was included to encourage return of the completed instrument. Each instrument was numerically coded so that a follow-up mailing could be directed only to those in the sample from whom a completed instrument had not yet been received.

Analysis of the Data

Initially, the demographic data of the research sample were examined by frequency distributions and percentages for gender, years of experience as a chief housing officer, type of institution, and number of student residence spaces on campus. Next, the responses of the research sample were compared to the model's prescribed response for each hypothetical problem. Frequency distributions and percentages were calculated for model matched and not matched responses. In addition to these frequency distributions, average decision behavior scores and standard deviations were calculated for each of the 32 problems.

A full model analysis of variance was used to determine if there were any two-way interaction among the factors of the Vroom-Yetton model and to indicate whether there appeared to be a significant main effect for one or more of the four factors. This analysis was employed in testing each of the four hypotheses in this study. A level of .05 was used to test for significance.

Following the results of the full model analysis of variance, a reduced model analysis of variance was used to explore further the main effects indicated for three of the factors by the earlier analysis. This analysis was utilized to test hypotheses 1, 2, and 4, respectively related to the factors of information needs, employee acceptance, and employee conflict. A level of .05 was again used to test for significance in this analysis.

In addition to the reduced model analysis of variance, pairwise t-tests were employed to determine if there were significant differences between each level of a particular factor. The .05 level was used to test these comparisons for significant differences.

Following the analyses using the responses from the full research sample, analyses of variance were used to test for differences among the respondents grouped by gender and years of experience as a chief housing officer. The .05 level was used to test for significance among these groups.

Overview of the Study

Chapter I has included an introduction, statement of the problem, theoretical background, the importance of the study, delimitations, definitions, and overview of methodology. In Chapter II, relevant research and literature related to the Vroom-Yetton model of decision making is presented. A detailed description of the methodology and design used to study the model is included in Chapter III. The results and analysis of the data are described in Chapter IV. Chapter V concludes the report with a discussion of the results and recommendations for further research in this area of educational leadership.

CHAPTER II
REVIEW OF RELATED LITERATURE

In this chapter, the literature related to this study will be reviewed. This research is concerned with the decision making processes used by administrators in college and university housing departments as measured by an application of the Vroom-Yetton model of decision making. Therefore, the review of literature pertains to the administration of college and university housing departments, decision making as an aspect of administration, and the Vroom-Yetton model of decision making.

College and University Housing

This section reviews the development of campus student housing departments and the complexity of issues confronting housing administrators today.

Higher education in the United States experienced significant growth during the last four decades. Over 3,000 institutions of higher education are identified by the National Center for Educational Statistics (Millet, 1980). As enrollments grew, so too did the complexities of the higher education system (Mayhew, 1973). Along with the increasing complexities of the system of higher education there was parallel increase in the complexity of roles for college and university administrators (Wolotkiewicz, 1980).

Student affairs departments have increased in staff and functional roles along with the growth in student enrollments over the last four decades (Fenske, 1980). In fact, student affairs developed into a major component of higher education institutions (NASPA, 1987). On most campuses, the division of student affairs is on the same hierarchal level as academic and business affairs (Crookston, 1978).

Although student housing has existed in various forms since the early years of higher education in the United States, the role of residence halls has changed several times (Schuh, 1988). As have many functional areas of student affairs, student housing departments have grown significantly to include larger staffs and expanded roles (Fenske, 1980).

Since the conclusion of World War II, campus housing has become incorporated within the totality of higher education (Fitzgerald, 1974). As far back as 1922, the president of Columbia University, Nicholas Murray Butler, suggested to the Trustees that residence halls were as important to the work of the university as were libraries, laboratories, and classrooms (Riker, 1974). Bess (1973) suggested that the integration of academic and nonacademic life on college campuses can have a powerful effect on educational outcomes. Riker (1965) proposed the development of living-learning centers in which classrooms and faculty offices are placed in residence halls. More recently, North (1987) suggested that campus residence hall space is increasingly being sought by academic affairs administrators who recognize the importance of providing academic services in the residential environment. In addition, housing staff are becoming increasingly involved in academic retention efforts on their campuses (North, 1987).

The importance of on-campus housing has been underscored through research conducted to determine if living on-campus has any effect on students. By comparing commuter students with students living in campus housing, Chickering (1974) concluded that residential students begin their college experience with an advantage over commuters, and this advantage increases over time. This advantage increases because residential students are exposed to more diverse people and experiences than commuter students (Chickering, 1974). Summarizing conclusions from various studies comparing commuter students to residential students, Astin (1977) indicated that on-campus living increases the chance a student will graduate and aspire to graduate or professional school. Residents are more satisfied with their college experience and are more likely to achieve in extracurricular activities. Astin (1985) concluded that "residential students stand a better chance than do commuter students of developing a strong identification with and attachment to undergraduate life" (p. 145). Pascarella (1985) advanced the notion that students' socialization was enhanced by living on campus as opposed to living off campus. Upcraft (1989) said, "There is substantial evidence that freshmen who live in residence halls are more likely to succeed in college than those who live elsewhere" (p. 142).

Administrators of campus housing departments are faced with numerous issues that command their attention. Schuh (1988) included the topics of needs assessment, environmental management, staff development, programming, and legal issues in a recent article on residence halls. Grimm (1986) identified issues related solely to facility management, including computers, security, energy conservation, roofing, flooring, and contracted services. North (1987) gave advice to new housing directors related to budgets, faculty relations, safety codes, purchasing guidelines, assignment of students, risk management, and reserve funds. It is apparent that housing administrators are challenged by diverse issues requiring effective decisions and active involvement by all levels of their staff.

Administration and Decision Making

This section reviews the development of educational administration, the functions of administration, and decision making as an important aspect of educational administration.

Educational administration as a field of study is a relatively new phenomenon (Hoy & Miskell, 1982; Kimbrough & Nunnery, 1983). The advent of administrative staffs for secondary schools began in the early part of the nineteenth century (Kimbrough & Nunnery, 1983). In higher education, administrative staffs were virtually nonexistent prior to 1878 when the presidents of Cornell and Harvard appointed professors to the positions of vice-president and dean of the faculty, respectively (Duryea, 1973). In the early part of the twentieth century, deans of women became the first student affairs administrators to begin meeting formally. Deans of men first met to discuss mutual concerns in 1917 (Peterson, Eddy, & Pitts, 1978). The basic philosophy guiding student affairs administration was first stated in 1937 by the American Council on Education Committee on Student Personnel (Robinson, 1978).

Many of the principles which have been applied to educational administration have been adapted from those used in public administration, business, and industrial organizations. Besse (1973) suggested that there is sufficient similarity between business organizations and universities to consider the transferability of management techniques. Reviewers of literature on the subject of administration use the terms administration, management, and leadership somewhat interchangeably (Hoy & Miskell, 1982; Kimbrough & Nunnery, 1983; Millett, 1980; Pugh, 1984; Simon, 1947).

Administration within an organization invariably involves the process of decision making (Eble, 1978; Griffiths, 1959; Hoy & Miskel, 1982; Kimbrough & Nunnery, 1983). Kimbrough and Nunnery (1983) noted "many theorists accept the idea that administration and decision making are almost the same, or at least that decision making is the most critical aspect of administration" (p. 323). Decision making is a major function or responsibility of administrators (Guthrie & Reed, 1986; Hoy & Miskel, 1982). Simon (1947) suggested that "decision-making is the heart of administration" (p. xiv). Hoy and Miskel (1982) further stated, "Administration is the performance of the decision-making process by an individual or group in an organizational context" (p. 265).

Decision making is described as an evaluation process leading to the choice of an available alternative (Maier & Verser, 1982). Simon (1947) defined decision making as "the process of choice which leads to action" (p. 1). Decisions are "the fundamental activity influencing performance" (Ivancevich, Szilagyi & Wallace, 1977, p. 382). Vroom (1984) suggested making decisions is a social process of problem solving. Decision making involves the process of examining objectives related to an issue and considering the costs and risks of alternatives

(Powers & Powers, 1983). Decisions are judgments put into action (Vickers, 1984).

Decision making strategies may vary from one individual to another. However, the decision making process follows the same general cycle in most complex organizations.

> The universality of the decision-making process calls attention to the fact that administration is essentially the same regardless of the specific context in which it takes place. Educational organizations are different, however, from industrial organizations in a great many substantive and important ways. For example, the technologies employed by each, as well as the products that result, are quite different. Yet the decision-making process in the areas of policy, resources, and execution is remarkably similar; indeed, it is substantively the same. Therefore, the study of educational administration must concern itself with the general, abstract subject of the decision-making process. Furthermore, much can be learned about educational administration through comparative analyses of the process of administration in a large number of contexts and in different types of organizations. (Hoy & Miskell, 1982. p. 268)

Simon (1947) suggested the process of decision making involves identifying the alternatives, determining the consequences of each alternative, and comparing the consequences for each alternative. Others suggest that one must first identify a situation that requires a decision and, after analyzing the alternative choices, select and implement the selected alternative (Griffiths, 1959; Maier & Verser, 1982).

A discussion of the decision making role of administrators leads to the issue of involving subordinates in the decision making process. Eble (1978) said, "The important decisions for which administrative officers are solely responsible are not likely to constitute a majority of decisions reached" (p. 128). Some suggest that those who will be affected by a decision should be consulted during the decision making process (Deegan, 1981; Wolotkiewicz, 1980). Yet such a belief would suggest subordinates should be involved in almost all decisions since they are ultimately affected by or are charged with implementing them.

Participatory or consultive decision making can be viewed as an aspect of democratic administration (Bass, 1981; Powers & Powers, 1983). Participation is used to describe the process of decision making in which subordinates are involved to some degree in the decision process through consultation or delegation, individually or in groups, by their supervisor. Elements of participation may include asking subordinates for their suggestions or approval on a matter, treating them as peers in the decision making process, or allowing them to make decisions that affect them (Bass, 1981). Some suggest that a leader's use of participation in decision making is a continuum ranging from no participation to full delegation, with several degrees of participation between the extremes (Tannenbaum & Schmidt, 1958; Heller & Yukl, 1969). Similarly, March and Simon (1958) described a range of decision making styles that includes decisions made solely by the supervisor and communicated to the subordinates at one end of the continuum to decisions reached on the basis of full discussion and expression of ideas between supervisor and subordinates at the other end of the continuum. Vroom and Yetton (1973) developed another decision making continuum of participation that includes five differentiated styles of decision making ranging from no participation to group decision making.

Most administrators make decisions using various degrees of participation by their subordinates (Bass & Valenzi, 1974; Hill, 1973). The choice of decision style appears to be determined to some extent by the nature of the situation (Hill & Schmitt, 1977; Vroom, 1984a). The research regarding the desirability of increased participation by subordinates in the decision making process has been mixed. Regarding the effectiveness of participatory decision making, Vroom (1976a) indicated that past research has come to the conclusion that it varies from one situation to another.

Simon (1947) suggested that administrators seek to reach a decision that will be satisfactory rather than seeking the optimal decision regarding an issue. Maier and Verser (1973) indicated decision effectiveness is a product of decision quality and acceptance. In their formula, decision quality refers to the objective facts related to the issue, while acceptance relates to the willingness of subordinates to implement the decision. It is from this formulation that Vroom and Yetton (1973) developed their normative model of decision making.

Vroom-Yetton Model

This section reviews the Vroom-Yetton model of decision making and the research conducted to determine the model's validity.

The Vroom-Yetton model takes the approach that decision making is a social process (Vroom & Yetton, 1973). Building on the earlier work of Maier regarding group problem solving and decision effectiveness, Vroom and Yetton developed a set of rules to govern a leader's choice of the degree of subordinate involvement appropriate in a given situation requiring a decision (Margerison & Glube, 1979). The model requires a leader to assess the situational demands and requirements of the problem in order to determine the level of participation the subordinates should have in reaching a decision. According to Vroom (1976b), this assessment is facilitated by answering yes or no to the following seven questions:

> 1. Is there a quality requirement such that one solution is better than another?
> 2. Does the leader have sufficient information to make a high quality decision?
> 3. Is the problem structured?
> 4. Is acceptance of decision by subordinates critical to effective implementation?
> 5. If the leader were to make the decision by himself or herself, is it reasonably certain that it would be accepted by the subordinates?
> 6. Do subordinates share the organizational goals to be obtained in solving this problem?
> 7. Is conflict among subordinates likely in preferred solutions? (p.19)

The model prescribes a decision style continuum that includes five decision behaviors a leader can utilize. These are

> AI - You solve problem or make decision yourself using information available to you.
> AII - You obtain necessary information from subordinates, then decide on solution to problem yourself. Subordinates are not asked to generate or evaluate alternative solutions.
> CI - You share the problem with relevant subordinates individually, getting their ideas and suggestions. Then you make the decision, which may or may not reflect your subordinates' influence.
> CII - You share the problem with your subordinates as a group, collectively obtaining their ideas and suggestions. Then you make the decision, which may or may not reflect your subordinates' influence.

> GII - You share the problem with your subordinates as a group. Together you generate and evaluate alternatives and attempt to reach a solution. You do not try to influence the group to adopt "your" solution and you are willing to accept and implement any solution which has the support of the entire group. (Bass, 1981, p. 327).

To facilitate research using the model, Vroom and Yetton developed scale values for the five decision behaviors in their continuum. In research with over 500 managers, it was clear that the intervals between the decision behaviors were not equal; therefore, applying a scale of one through five would not be an accurate reflection of the participation continuum (Vroom & Yetton, 1973). Using the Goode Algorithm, metric values from 0 to 10 were obtained for each decision style. These values originally calculated as 0 - AI, .625 - AII, 5 - CI, 8.125 - CII and 10 - GII, were rounded to 0, 1, 5, 8, and 10 (Vroom & Yetton, 1973). Most of the studies conducted with the Vroom-Yetton Model have employed these scale rankings to quantify the findings of the research (Field, 1979; Field, 1982; Heilman, Cage, Hornstein, & Herschlag, 1984; Hill & Schmitt, 1977; Jago & Vroom, 1977, 1982; Vroom, 1976a; Vroom & Jago, 1974, 1978; Vroom & Yetton, 1973).

"The Vroom-Yetton normative model of leadership is important to managers because it provides a model of how leaders should use different decision-making methods in different situations to be effective" (Field, 1982, p. 523). The seven rules governing the model combine to eliminate one or more of the prescribed decision behaviors based on the situational assessment derived from the questions. The leader is then prescribed one or more of the remaining decision behaviors as appropriate for that particular situation.

Using a set of standardized cases which they validated, Vroom and Yetton (1973) assessed the degree to which the managers conformed to the normative aspects of the model and the extent of variance in decision behaviors due to individual or situational differences. Their findings indicated that the managers agreed with the model's prescriptions 66% of the time. They also found that approximately 10% of the variance in decision style was due to individual tendencies to be more autocratic or more participatory, while 30% of the variance was found to be related to situational effects (Hill & Schmitt, 1977). Vroom and Jago (1978) demonstrated validity for the model with managers who reported successful and unsuccessful decisions that were then evaluated according to the model. They found that decisions made within the prescriptions of the model had a significantly higher rate of success than those decisions falling outside the feasible sets. Using hypothetical cases requiring yes or no answers to the model's seven situational assessment questions, Jago (1978) found results similar to those of Vroom and Yetton.

Applying the model to managers at different levels of organizational hierarchy, Jago and Vroom (1977) found that managers higher in the hierarchy tended to be more participatory except when the situation called for a high quality decision. Jago and Vroom (1982) also found that women tended to be more participatory than men except in situations that required a high level of acceptance and commitment by their subordinates. Robert used a standardized case design to compare decision style differences for 48 military officers, 48 government officials, 48 business executives, and 48 university professors. His findings indicated significant differences in decision style tendency across occupational groupings. The government officials and university professors were more participatory in their approach while the military officers were found to be more autocratic (Vroom, 1984b).

Vroom and Yetton (1973) indicated and Vroom (1984b) restated that their model was still evolving in response to research. While the study by Robert did compare decision behaviors of university professors with those in other noneducational occupational settings, no other research has been found to measure the model's validity using educational administrators, particularly in higher educational settings outside academic affairs.

CHAPTER III
RESEARCH METHODOLOGY

Purpose of the Research

The purpose of this study was to determine if the decision making model developed by Vroom and Yetton (1973) describes the manner in which college housing administrators perceive they would involve their employees in making decisions.

The null hypotheses developed for testing to achieve the purpose of this research were as follows:

> Hypothesis 1. The location and availability of information needed to solve a problem has no effect on an administrator's choice of decision making behavior.
>
> Hypothesis 2. The importance of subordinates' acceptance of a decision and the likelihood of subordinates accepting an autocratic decision has no effect on an administrator's choice of decision making behaviors.
>
> Hypothesis 3. Congruence between the subordinates' goals and the organization's goals relative to a particular problem has no effect on an administrator's choice of decision making behavior.
>
> Hypothesis 4. The likelihood of conflict among subordinates over proposed alternative solutions to a problem has no effect on an administrator's choice of decision making behavior.

The level for statistical significance was set at .05 for the analysis of variance procedures and resulting probability values calculated for each hypothesis tested.

Population and Sample

The population for this study included all chief housing officers at colleges and universities in the United States that hold membership in the Association of College and University Housing Officers - International. This population consisted of 556 chief housing officers according to the 1988 ACUHO-I Directory (Sautter, 1988).

This group of college housing administrators was used for this study because they are the housing officers most likely to be responsible for the final decisions made regarding housing policies and procedures, budget management, student behavior, facility management, and program development. In addition, these chief housing administrators often have similar backgrounds in education and experience as administrators in other student affairs departments.

A computer-generated random sample consisting of 25% of the population was used as a representative sample of chief housing officers in the United States. The total number in the random sample used in this study was 139 chief housing officers.

Instrumentation

Developing Hypothetical Problems

A set of 32 hypothetical problems was developed by the researcher. These 32 problems represented every combination of the situational attributes described in the Vroom-Yetton Model (Jago, 1978) for which the model would eliminate at least one of the alternate decision making behaviors as inappropriate. Respondents were asked to read each problem and treat the information given in the problem as if it represented an abstract diagnosis of a real situation and then to choose the one alternative decision making behavior that they would use if the problem had been a real situation on their campus.

Validity of the Hypothetical Problems

In previous research related to the Vroom-Yetton decision model, 30 standardized scenarios were developed which depicted actual decision making situations commonly faced by managers. Information was included within each problem description to manipulate systematically each of the situational attributes employed in the model (Jago, 1978). Vroom and Yetton (1973) provided evidence supporting the internal and external validity of this instrument. Later, Jago (1978) developed an instrument he called a profile set that contained hypothetical cases represented by simple yes or no responses to seven key questions that represented the situational attributes contained in the Vroom-Yetton model. Jago's instrument contained 36 problems representing all plausible combinations of the attributes of the Vroom-Yetton model. In recognizing this approach as a valid test of the model, Vroom (1984b) writes

> In this research, we have used three methods. One is what we call recalled problems in which managers describe actual instances of decision-making which they personally have confronted and the methods they have used in dealing with them. The second involves the use of standardized cases -- a problem set made up of as few as four but frequently 30, 48, or 54 cases selected in accordance with a multi-factorial experimental design. Each case ranges in length from a long paragraph to a page and describes a leader confronted with a decision to make. The managers are asked to assume the role of the leader and to specify what decision process they would use in each situation. The third method is really a derivative of the second. As far as I can tell, it was invented independently by Hill and Schmitt (1977) and Art Jago (1978). Jago calls it a Profile Set. It substitutes for the rich institutional context

> found in a typical case -- a bare bones analysis of the basic elements in the case. "You do not have the information required; the problem is unstructured, you need the acceptance of others, and so on."
>
> The picture painted by the use of these three different methods is remarkably similar. (p. 28)

The instrument developed for this study uses Jago's definitions and levels of the model's situational attributes (Appendix H) in developing a set of 36 unique and plausible hypothetical problems. Employing only the statements to which Jago's instrument provided yes or no answers in describing the problems, this instrument consisted of narrative problem descriptions that indicate the presence or absence of a particular situational attribute of the Vroom-Yetton model (Appendix I). The final form of the instrument was limited to the 32 hypothetical problems for which the model suggested the elimination of at least one of the response options as a prescription for reaching a decision.

Jago conducted an analysis to determine the degree of convergent validity of the profile set with the original 30 standardized scenarios developed by Vroom and Yetton to test their decision model. In this analysis, focusing on calculated mean levels of participation as indicated by respondents to both instruments, as well as comparisons of agreement with the model of responses to both instruments, Jago (1978) found "the values for these indices were not significantly dependent on the type of instrument and remain remarkably similar to those reported in prior research for different samples" (p. 491).

Based on Jago's validity studies and his review of the manner in which the hypothetical problems were written for the instrument used in this study, the hypothetical problems are assumed to be valid problems to use in measuring the degree with which the Vroom-Yetton model accurately describes the manner in which college housing administrators involve their employees in making decisions.

Validity of the Response Alternatives

The five response alternatives for each problem were modified and validated (Jago, 1978) with the five decision behaviors developed by Vroom and Yetton. However, rather than use their descriptive abbreviated codes (Vroom & Yetton, 1973) for each response alternative, the five response alternatives were labeled A, B, C, D, and E.

Since the response alternatives were previously validated with those developed by Vroom and Yetton in their model, further validation of the response set was considered redundant.

Pilot Study

Once development of the instrument was completed, a pilot study was conducted. The participants were college housing administrators at the University of Florida who had a minimum of five years experience in the college housing field. After they completed the instrument, they were asked to provide comments concerning the clarity of instructions, problem descriptions, and response alternatives. In addition, they were asked to report the approximate time it took to complete the instrument. Their comments and suggestions were considered in the final design of the instrument prior to its printing.

Administration of the Instrument

Prior to the mailing of the instrument, a letter was sent to each of the participants advising them of the purpose of the study. They were requested to complete the instrument and mail it back in the pre-addressed envelope which would accompany their instrument. Included in the preliminary announcement was an endorsement letter from the Research and Information Committee of ACUHO-I. Following the preliminary announcement, the instrument with accompanying cover letters and return envelope was mailed to each participant. They were asked to complete the instrument and return it in two weeks. Although each instrument was coded to help focus follow-up efforts, the participants were assured that their individual responses would be kept confidential. A letter from Dr. James Wattenbarger, Director of the Institute of Higher Education, was included with the instrument, along with the cover letter from Mr. James C. Grimm and this researcher. A follow-up letter was sent to those in the research sample who did not return a completed instrument by the printed deadline (Appendix J).

Treatment of the Obtained Data

Demographic data regarding the respondents and their institutional settings were compiled for possible use in future research.

Responses by each participant to the 32 hypothetical problems provided a measure of their overall agreement with the prescriptions of the model. The data collected in this study were analyzed using the Statistical Analysis System (SAS) computer program. This system provided the necessary functions and incorporated the statistical tools to analyze the data in such a way as to give information to support decisions to accept or reject the null hypotheses outlined at the beginning of this chapter.

The demographic data were analyzed using frequency distributions and percentages. Following this, the responses of the research sample were compared with the prescriptions of the Vroom-Yetton model for each of the 32 problems. Frequency distributions and percentages were calculated to indicate model matched responses. The response set was coded to quantify and calculate average decision behavior scores with standard deviations.

The data were then analyzed using a full model analysis of variance to test the four hypotheses and look for evidence of significant main effects for any of the four factors. In this same analysis, two way interactions were examined for the Vroom-Yetton model's situational factors.

Based on the results of the full model analysis of variance, a reduced model analysis of variance was employed with the factors for which there was evidence of a significant main effect. This provided evidence to test the hypotheses related to information needs, employee acceptance, and employee conflict.

For these three hypotheses, pairwise comparisons, via t-tests, were examined to determine if there were significant differences between different levels of the factors related to information needs, employee acceptance, and employee conflict.

Following the analyses using responses from the complete research sample, the responses were grouped according to gender and level of experience of the respondents. Analyses of variance were applied to these groupings to determine if the responses varied significantly between male and female administrators or between those with five years or less experience and those with more than five years experience.

For each of the analyses of variance and the T-tests, a level of

.05 was employed to test for significance and to determine acceptance or rejection of each null hypothesis.

Summary

This chapter described the design and methodology employed in this study. After outlining the purpose of the research, the population and sampling procedures were described. The design of the instrument along with a pilot study of the instrument's use were then detailed. Following an explanation of the procedures used in administering the instrument, the methods of data analysis were discussed.

CHAPTER IV
PRESENTATION AND ANALYSIS OF THE DATA

The purpose of this study was to determine if the decision making model developed by Vroom and Yetton describes the manner in which college and university housing administrators perceive they would involve their employees in making decisions. In particular, the study examined whether housing administrators' decision behavior was affected by (a) the information needs of a situation; (b) whether employees would accept and support the decision; (c) the extent of goal congruence between the organization and employees in solving a problem; and (d) the likelihood of conflict among employees in considering alternative decisions. The housing administrators surveyed for the study were chief housing officers at colleges and universities in the United States. An instrument which presented hypothetical problems was used to collect the data for the study. The four hypotheses tested in this research are individually detailed and analyzed in this chapter.

Research Sample

The population from which a sample was developed consisted of the chief housing officers of colleges and universities in the United States which were members of the Association of College and University Housing Officers - International (ACUHO-I) in 1988. The 556 institutions which were located in the United States and were also members of ACUHO-I comprised the population from which a random sample of 25% of the institutions were determined by computer. The chief housing officers at the institutions in the random sample comprised the sample used for this research. This resulted in a research sample of 139 individuals.

Of the 139 chief housing officers who were sent research instruments, 108 (77.7%) useable instruments were returned. These 108 sets of data were used for analysis and testing of the hypotheses. Table 4-1 reports the frequencies and percentages of respondents according to gender, years of experience as a chief housing officer, type of institution at which they currently work (public or private), and the number of student spaces available through their campus housing department. The respondents included 83 (77%) males and 25 (23%) females. Of the 108 respondents, 50 (46%) had fewer than 6 years experience as a chief housing officer and 58 (54%) had 6 or more years experience as a chief housing officer. The respondents reported that 66 (61%) were at public institutions and 42 (39%) were at private institutions. In regards to the number of campus housing spaces at their institutions, they reported that 59 (55%) had fewer than 2,500 spaces and 49 (45%) had 2,500 or more spaces available for students.

Analysis of the Data

The objective of this study was to determine if college and university housing administrators followed the prescriptions of the Vroom-Yetton model in determining the level of employee involvement in decision making for hypothetical problems. In this section the analysis techniques used to test the hypotheses are described.

The Vroom-Yetton model consists of four variables related to the information needs of a situation, the likelihood of employees accepting

Table 4-1

Frequency Distribution By Gender, Experience, Institution, and Number of Bedspaces

Group	Frequency	Percentage
Gender		
Female	25	23.2
Male	83	76.8
Experience		
Less than 6 years as CHO	50	46.3
6 years or more as CHO	58	53.7
Institution		
Public	66	61.1
Private	42	38.9
Number of Bedspaces		
Less than 2,500	59	54.6
2,500 or more	49	45.4

N = 108

Table 4-2

Frequency and Percentage of Model Matched Responses for Each Problem and Average Decision Behavior Score

Problem	Model Matched N	Model Matched %	Not Matched N	Not Matched %	Average Decision Behavior Score	Standard Deviation
1	33	30.6	75	69.4	7.722	2.152
2	58	53.7	50	46.3	6.194	3.110
3	36	33.3	72	66.7	6.963	2.597
4	28	25.9	80	74.1	7.046	2.635
5	47	43.5	61	56.5	5.240	3.203
6	44	40.7	64	59.3	8.231	2.035
7	104	96.3	4	3.7	4.602	3.485
8	105	97.2	3	2.8	2.917	3.380
9	26	24.1	82	75.9	6.917	2.673
10	34	31.5	74	68.5	5.065	3.336
11	15	13.9	93	86.1	5.463	3.155
12	38	35.2	70	64.8	4.537	3.242

Table 4-2 continued

Problem	Model Matched N	Model Matched %	Not Matched N	Not Matched %	Average Decision Behavior Score	Standard Deviation
13	107	99.1	1	0.9	5.963	2.998
14	5	4.6	103	95.4	2.426	3.399
15	87	80.6	21	19.4	7.056	2.367
16	97	89.8	11	10.2	4.361	3.170
17	46	42.6	62	57.3	6.120	2.754
18	76	70.4	32	29.6	6.889	2.780
19	83	76.9	25	23.1	7.324	2.144
20	91	84.3	17	15.7	6.269	3.098
21	29	26.9	79	73.1	4.759	3.102
22	98	90.7	10	9.3	4.972	3.042
23	101	93.5	7	6.5	4.787	3.415
24	42	38.9	66	61.1	8.296	1.789

Table 4-2 continued

Problem	Model Matched N	Model Matched %	Not Matched N	Not Matched %	Average Decision Behavior Score	Standard Deviation
25	98	90.7	10	9.3	5.352	3.125
26	50	46.3	58	53.7	6.722	2.877
27	107	99.1	1	0.9	5.389	3.209
28	50	46.3	58	53.7	7.990	2.067
29	103	95.4	5	4.6	4.093	3.397
30	105	97.2	3	2.8	5.204	3.395
31	45	41.7	63	58.3	7.759	2.174
32	51	47.2	57	52.8	7.963	1.976
Total	2039	59.0	1417	41.0		

the decision reached, the congruence of employee's goals with those of the organization, and the likelihood of conflict among employees in reaching a decision. The variables related to information needs and decision acceptance have three response levels. The variables related to goal congruence and conflict have two possible response levels. To gather data related to these variables and the distribution of response within each variable, an instrument titled "Decision Styles Inventory" was used. This instrument consisted of 32 hypothetical problems which included all combinations of responses in the Vroom-Yetton model's variables for which the model would predict one to four of the five possible decision behaviors. After reading each hypothetical problem, the respondents were asked to choose one of the five decision styles most reflective of the style of decision making they would prefer using if the problem were a real situation. The respondents' answers were compared with the responses prescribed by the model for each of the 32 problems. Table 4-2 gives the frequency distributions and percentages of model matched responses for each problem and for the sample as a whole. Overall, 59% of the responses were within the prescriptions of the model.

The Vroom-Yetton model describes decision making behaviors as ranging from no involvement of employees in the decision making process to full participation by employees in the decision making process with three intermediate decision making behaviors. Vroom and Yetton conducted an analysis of this range to determine the relative value of each behavior on a scale of 0 to 10. These same values (A=0; B=1; C=5; D=8; and E=10) were used to quantify the response set of the "Decision Styles

Inventory". To conduct the necessary statistical analyses,the respondents' answers were coded according to these prescribed values (see Table 4-2).

The 32 problems posed in the questionnaire represent combinations of the different levels of the four factors; information needs, employee acceptance, goal congruence, and conflict. The analysis of factor effects which follow was performed on the decision behavior scores averaged over all respondents (see Table 4-2).

An analysis of variance (Table 4-3) was used initially to determine if there were any two-way interactions between the variables in the Vroom-Yetton model and to provide indication of any statistically significant main effects for one or more of the four factors. An interaction or main effect was significant if the probability value associated with that effect in the analysis of variance model was less than or equal to the .05 level of significance. The null hypothesis of no differences in the levels of a model factor was not rejected when the probability value was greater than .05 and was rejected when the probability value was less than the .05 level of significance.

Based on the results of the full model analysis of variance, a reduced analysis of variance model was used consisting of only those variables which in the earlier analysis showed a significant effect on the decision behaviors of the respondents. A significance level of .05 was again used to determine which variables, if any, exhibited a significant effect on respondent's choice of decision behavior.

Table 4-3

Analysis of Variance - Full Model

Source	DF	SS	F-value	Probability
Main Effect				
Information (A)	2	10.208	6.65	.0114
Acceptance (B)	2	35.147	22.90	.0001
Goal Congruence (C)	1	1.355	1.74	.2118
Conflict (D)	1	9.477	12.35	.0043
Interaction Effects				
A * B	4	1.659	.54	.7091
A * C	2	2.189	1.43	.2782
A * D	2	3.645	2.37	.1352
B * C	2	.384	.25	.7829
B * D	2	.130	.08	.9191
C * D	1	1.077	1.40	.2591

Note: Effects are considered significant if the probability is less than or equal to .05.

In the reduced model, no interactions were used, hence the final model was a one-way analysis of variance.

Effect of Information Needs on Decision Behavior

The location and availability of information needed to make a decision is one of the variables which the Vroom-Yetton model indicates is important in determining the degree of involvement one should seek from employees in reaching the decision.

> Hypothesis 1. The location and availability of information needed to solve a problem has no effect on an administrator's choice of decision making behavior.

The full model analysis of variance indicated no significant interactions between information needs and the other factors (Table 4-3), but there was the suggestion of a significant main effect for information needs. The reduced model analysis of variance (Table 4-4) showed strong significance for information needs (p=0.0024), indicating that average decision behavior can be expected to be different given different information needs. Mean decision behavior scores for each of the information levels is given in Table 4-5. From these means it seems that as the information available goes up, i.e. more available information, there is less need for shared decisions. Pair-wise comparisons, via t-tests, of the mean scores for the different information levels indicated that there are significant differences between level 1 and level 2 (p=0.0284), between level 1 and level 3 (p=0.0006), but not between level 2 and level 3 (p=0.0833). This implies that decision behavior does not seem to depend on minor differences in the level of information needed, but whether information is available or not.

Table 4-4

Analysis of Variance - Reduced Model

Source	DF	SS	F-value	Probability
Main Effect				
Information	2	11.559	7.67	.0024
Acceptance	2	37.154	24.67	.0001
Conflict	1	7.101	9.43	.0050

Note: Effects are considered significant if the probability is less than or equal to .05.

Table 4-5

One-Way Analysis of Variance for Information Effect

Information Levels	LS Mean	Standard Error	Probability
1	4.935	.311	.0001
2	5.863	.251	.0001
3	6.501	.251	.0001

Comparisons	Difference	Probability
Level 1 vs. Level 2	.928	.0284
Level 1 vs. Level 3	1.566	.0006
Level 2 vs. Level 3	.638	.0833

Note: Differences are considered significant if the probability is less than or equal to .05.

Based on these results and the fact that the probabilities for each analysis is less than the .05 level, the null hypothesis for the factor of information needs is rejected.

Effect of Subordinates' Acceptance of the Decision

The Vroom-Yetton model indicates that another variable affecting decision making behavior is the factor of employees' willingness to accept an autocratic decision in a given situation.

> Hypothesis 2. The importance of subordinates' acceptance of a decision and the likelihood of subordinates accepting an autocratic decision has no effect on an administrator's choice of decision behavior.

The full model analysis of variance indicated there was evidence of a significant main effect for the factor of employee acceptance (Table 4-3), but there was no indication of significant interactions between employee acceptance and the other factors. The reduced model analysis of variance (Table 4-4) showed strong significance for employee acceptance (p=0.0001). This indicates average decision behavior can be expected to be different when the likelihood of employee acceptance changes. Table 4-6 gives the mean decision behavior scores for each of the employee acceptance levels. These means appear to indicate that as the likelihood of employee acceptance decreases, the need for shared decision making increases.

Table 4-6

One-Way Analysis of Variance for Acceptance Effect

Acceptance Levels	LS Mean	Standard Error	Probability
1	7.141	.251	.0001
2	5.625	.279	.0001
3	4.533	.279	.0001

Comparisons	Difference	Probability
Level 1 vs. Level 2	1.516	.0004
Level 1 vs. Level 3	2.608	.0001
Level 2 vs. Level 3	1.092	.0092

Note: Differences are considered significant if the probability is less than or equal to .05.

Pairwise comparisons, using t-tests, of the means scores for the different employee acceptance levels indicated that there are significant differences between level 1 and level 2 (p=0.0004), between level 1 and level 3 (p=0.0001) and between level 2 and level 3 (p=0.0092). This suggests any variance in the likelihood of employee acceptance of a decision has an effect on decision behaviors.

Based on these analyses all resulting in probabilities less than the .05 level, the null hypothesis for the factor of employee acceptance is rejected.

Effect of Goal Congruence

In the Vroom-Yetton model, the congruence between subordinates' goals and the goals of the organization is a variable which may affect decision making behavior.

> Hypothesis 3. Congruence between the subordinates' goals and the organization's goals relative to a particular problem has no effect on an administrator's choice of decision making behavior.

The full model analysis of variance (Table 4-3) indicated there was no significant main effect for the factor of goal congruence (p=0.2118).

In examining possible interaction between the factor of goal congruence and the other three factors of the Vroom-Yetton model, we found no significant interaction in the results of the full model analysis of variance (Table 4-3). For interaction between the factors of goal congruence and information needs, analysis of variance indicated no significant interaction (p=0.2782). For interaction between the variable of goal congruence and decision acceptance, the analysis of variance again showed no significant interaction (p=0.7829). In examining possible interaction between the variable of goal congruence and subordinate conflict, the analysis of variance showed no significant interaction (p=0.2591). Since all these probabilities are greater than the .05 level, any main effects or interactions between the factor of goal congruence and the other three factors of the Vroom-Yetton model are considered not significant.

Based on the results of the analysis for main effect of goal congruence and interaction between goal congruence and any of the other three variables, there is no evidence to reject this null hypothesis. Therefore, the null hypothesis is not rejected.

Effect of Subordinate Conflict on Decision Behavior

In determining the level of subordinate involvement in solving a particular problem, the Vroom-Yetton model indicates the likelihood of conflict between subordinates over the choice of a solution may affect the way a decision is reached.

> Hypothesis 4. The likelihood of conflict among subordinates over proposed alternative solutions to a problem has no effect on an administrator's choice of decision making behavior.

The full model two-way analysis of variance indicated no significant interactions between the factor of employee conflict and the other factors of the Vroom-Yetton model (Table 4-3). However, this analysis did provide evidence of a significant main effect for the factor of employee conflict. In the reduced model analysis of variance, further evidence was provided regarding a significant main effect for employee conflict (p=0.0050). This suggests that average decision behavior can be expected to be different given different expectations of employee conflict in arriving at an acceptable decision. Mean decision

Table 4-7

One-Way Analysis of Variance for Conflict Effect

Conflict Levels	LS Mean	Standard Error	Probability
1	6.237	.220	.0001
2	5.295	.220	.0001

Comparisons	Difference	Probability
Level 1 vs. Level 2	.942	.0050

Note: Difference is considered significant if the probability is less than or equal to .05.

scores for each level of employee conflict are given in Table 4-7. These mean scores seen to indicate that as the likelihood for employee conflict increases, the need for shared decision making increases also.

A pairwise comparison, via a t-test, of the mean scores for the two levels of likelihood for employee conflict over proposed decisions indicates there is a significant difference between level 1 and level 2 (p=0.0050).

Based on these analyses and their respective probabilities being less than the .05 level, the null hypothesis is rejected regarding the effect of employee conflict on decision making.

Effect of Gender on Decision Behavior

Further analysis was conducted to determine if the gender of an administrator or their amount of experience as a chief housing officer would indicate any differences in regard to the effect the four situational factors of the Vroom-Yetton model had on the respondents' decision making behaviors. A level of .05 was used to test for significance in these analyses.

In analyzing the responses of the female administrators, a main effects model analysis of variance (Table 4-8) indicated there were significant main effects for the factors of information needs (p=0.0401), subordinate acceptance (p=0.0001), and subordinate conflict (p=0.0355). This analysis also indicated that there was no significant main effect for the factor of goal congruence (p=0.7693).

The data for the male administrators were similar to the findings for female administrators. The main effects model analysis of variance (Table 4-9) indicated no significant main effect for the factor of goal

Table 4-8

Analysis of Variance - Main Effects Model for Females

Source	DF	SS	F-value	Probability
Information	2	11.878	3.67	.0401
Acceptance	2	70.873	21.89	.0001
Goal Congruence	1	.142	.09	.7693
Conflict	1	8.000	4.94	.0355

Note: Effects are considered significant if the probability is less than or equal to .05.

Table 4-9

Analysis of Variance - Main Effects Model for Males

Source	DF	SS	F-value	Probability
Information	2	12.322	10.14	.0006
Acceptance	2	29.917	24.62	.0001
Goal Congruence	1	.836	1.38	.2519
Conflict	1	6.841	11.26	.0025

Note: Effects are considered significant if the probability is less than or equal to .05.

congruence (p=0.2519) while providing evidence of significant main effects for the factors of information needs (p=0.0006), subordinate acceptance (p=0.0001), and subordinate conflict (p=0.0025).

These findings provide some evidence that there are no significant differences in decision behavior between male and female administrators when the Vroom-Yetton model is used to compare the two groups. Both male and female administrators appear to choose decision behaviors based somewhat on the information needed to reach a decision, the likelihood that their subordinates will accept their decision and the likelihood of their subordinates developing conflicts about proposed solutions to a problem. Neither males or females appear to consider the degree of goal congruence between their subordinates and the organization when choosing a decision making style relative to a particular problem.

Effect of Experience on Decision Behavior

Similar analysis was conducted to determine if the experience of an administrator would indicate any differences in consideration of the factors in the Vroom-Yetton model when reaching a decision on a particular problem. Once again a level of .05 was used to consider the significance of any findings.

To compare differences in experience, the respondents were grouped according to those with five years or less experience (less than six years as a chief housing officer) and those with more than five years experience (six or more years as a chief housing officer).

Using a main effects model analysis of variance (Table 4-10), the responses from the less experienced administrators provided no evidence

Table 4-10

Analysis of Variance - Five Years or Less Experience

Source	DF	SS	F-value	Probability
Information	2	9.726	5.19	.0238
Acceptance	2	38.833	17.51	.0003
Goal Congruence	1	.149	.16	.6976
Conflict	1	11.044	11.78	.0050

Note: Effects are considered significant if the probability is less than or equal to .05.

of a significant main effect for the factor of goal congruence (p=0.6976). However, the analysis did indicate there were significant main effects for the factors of information needs (p=0.0238), subordinate acceptance (p=0.0003), and subordinate conflict (p=0.0050).

Applying the same analysis of variance technique to the responses of the group with more than five years experience (Table 4-11), similar findings were obtained. There was no evidence of a significant main effect for goal congruence (p=0.0590), yet there were indications of main effects for the factors of information needs (p=0.0081), subordinate acceptance (p=0.0001), and subordinate conflict (p=0.0065).

As with the findings related to gender, the experience of an administrator does not appear to affect the choice of decision behavior when the Vroom-Yetton model is used to compare those with five years or less experience as a chief housing officer to those with more than five years experience.

These findings relative to gender and experience provides evidence that the Vroom-Yetton model is useful in examining administrators' decision making behavior without regard to the group's gender or experience characteristics.

Summary

This chapter has provided information regarding the research sample, including the demographic characteristics of the sample. In addition, the statistical techniques used to analyze the data have been described. The results of the analyses in relation to the null hypotheses have been provided, along with analyses relative to the

Table 4-11

Analysis of Variance - More Than Five Years Experience

Source	DF	SS	F-value	Probability
Information	2	11.242	7.39	.0081
Acceptance	2	37.808	24.85	.0001
Goal Congruence	1	3.311	4.35	.0590
Conflict	1	8.222	10.81	.0065

Note: Effects are considered significant if the probability is less than or equal to .05.

gender and level of experience of the respondents. The following statements summarize the results and findings of this study.

1. College and university housing administrators' choice of decision behaviors agreed with the prescriptions of the Vroom-Yetton model 59% of the time. This is relatively consistent with previous research of the model. This statistic alone would provide evidence to support the model as descriptive of the decision making behavior of chief housing officers. However, further analyses lead to different conclusions.

2. There were no significant two-way interactions between any of the factors of the Vroom-Yetton model. This finding indicates that respondents considered each factor (information needs, subordinate acceptance, and subordinate conflict) in a problem as independent from the other factors. One might have assumed for instance that if a leader had all the information needed to make the decision and it was believed that the subordinates would accept the decision, then these two factors would work together to prescribe an autocratic decision. The findings however do not support such an assumption of factor interaction.

3. There was a significant main effect on administrators' choice of decision making behavior by the factor related to the information needs of a specific problem. This indicates that whether subordinates have information useful in reaching a decision is an important factor in determining whether to involve the subordinates in the decision making process.

4. There was a significant main effect on administrators' choice of decision making behavior by the factor related to the importance of subordinates' acceptance of the decision in a given situation. This

finding supports the Vroom-Yetton model in so far as consideration of the likelihood of one's subordinates accepting an autocratic decision along with the need for their acceptance is an important factor in determining the amount of consultation warranted in reaching a decision.

5. There was no significant main effect on administrators' choice of decision making behavior by the factor related to the congruence of subordinates' goals and the goals of the organization in a particular situation. This finding does not support the Vroom-Yetton model as an accurate predictor of the respondents' decision making behavior. The respondents indicated this factor did not affect the degree to which they would involve their subordinates in decision making.

6. There was a significant main effect on administrators' choice of decision making behavior by the factor related to the likelihood of conflict between subordinates over proposed solutions to a problem. Therefore, it is apparent, as indicated by the Vroom-Yetton model, administrators do consider whether the search for a solution to a particular problem is likely to generate conflict among the subordinates. Based on this assessment, the administrators choose the degree of involvement they wish to solicit in reaching a decision for that particular problem.

7. The evidence from this study suggests that the Vroom-Yetton model of decision making does not fully describe the way college and university housing administrators involve their employees in the decision making process. While three of the factors suggested as important by the model (information needs, subordinate acceptance, and subordinate conflict) in determining how best to reach a decision have been supported by this study, one of the factors deemed important by

Vroom and Yetton (goal congruence) has not been supported by this research.

8. A similar pattern of decision making behaviors was observed for females and males in this study. The results of the analysis of these groups indicates findings similar to those reported for the full sample. Both males and females consider the factors of information needs, subordinate acceptance, and subordinate conflict important in determining the decision making behavior to employ for particular problems. In addition, both groups rejected the factor of goal congruence as having significant importance in their choice of decision making behaviors.

9. There also did not appear to be any differences in decision making behaviors between groups of respondents with five years or less experience than those with more than five years experience as measured by this model. As with the male/female comparisons and the results of the respondents as a whole, the factors of information needs, subordinate acceptance, and subordinate conflict appear to affect both these groups of respondents similarly when they select a decision making behavior for a given problem. The factor of goal congruence does not appear to have any significant affect on choice of decision making behavior by either of these groups of respondents.

In general, the findings of this study indicate the Vroom-Yetton model of decision making describes only in part the decision making behavior of chief housing officers at colleges and universities in the United States.

CHAPTER V
SUMMARY AND CONCLUSIONS

This chapter includes four sections related to the study. In the first section, an overview of the research is provided, including the purpose, justification, theoretical framework, literature review, and methodology. Section two will summarize the major findings of the research. In section three, the conclusions reached as a result of this study are provided followed by section four which includes a review of implications for future research.

Overview of the Research

The major objective of this research was to determine if the decision making model developed by Vroom and Yetton (1973) describes the manner in which college and university housing administrators perceived they would involve their employees in making decisions. In particular, the study focused on the four variables of information needs, decision acceptance, goal congruence, and employee conflict as situational factors affecting the manner and degree of employee involvement in hypothetical problems.

College and university housing administrators work in an increasingly complex environment involving problems across a diverse range of issues (Grimm, 1986; North, 1987; Schuh, 1988). These issues require decisions to be made daily, and the quality of the decisions is increasingly called into question as accountability in the overall higher education atmosphere increases. Not only do college or university housing administrators need to be assured of making high quality decisions, but he or she also must insure that the decisions are implemented successfully by his or her staff. The Vroom-Yetton model was developed to protect the quality of decisions while assuring support and acceptance by the employees of an organization.

The study was considered important to determine if the Vroom-Yetton decision making model would be an effective process to use in determining the most effective level of employee involvement to encourage in solving various problems facing college and university housing administrators.

The Vroom-Yetton model of decision making is a prescriptive model for determining the degree of subordinate involvement one should encourage in reaching specific decisions. The model prescribes one or more of five decision behaviors ranging from no involvement by subordinates to full involvement in a group meeting with subordinates. The rules governing the model's prescriptions are based on the objective of protecting the quality of the decision and insuring the acceptance of the decision by the subordinates.

The literature review provided background information on three topics. First, the field of student affairs, and more specifically, that of college and university housing programs was discussed. This provided background about the importance of campus housing programs and the environment in which housing administrators work. Secondly, the literature review examined the role of decision making as it relates to the overall work of educational administration. This underscored the importance of effective decision making in administration. Lastly, the literature review gave an overview of participation in decision making and examined the development of the Vroom-Yetton decision making model.

To gather data for the study, an instrument called the "Decision Styles Inventory" was developed. The instrument included five demographic questions and 32 hypothetical problems. The response set included the five decision behaviors developed by Vroom and Yetton (1973) to encompass the continuum of subordinate involvement in decision making. The respondents were asked to read each hypothetical problem and select one of five possible decision behaviors to reflect the process they were most likely to use if faced by such a problem at work.

The research population for this study included all chief housing officers at colleges and universities located in the United States who were also members of the Association of College and University Housing Officers - International. A computer-assisted 25% random sample was developed which included 139 chief housing officers. The instrument was sent to this research sample and 108 (77.7% return rate) useable instruments were returned.

The data were analyzed statistically by computer using procedures available with the Statistical Analysis System. The actual procedures used were frequency distributions along with one-way and two-way analyses of variance in the General Linear Models Procedure. A level of .05 was used to determine if the results were significant for the analyses.

Major Findings of the Research

To accomplish the objective of the study, determining if the Vroom-Yetton model of decision making accurately describes the self-reported decision behaviors of chief housing officers on hypothetical problems, four null hypotheses were developed and tested. These hypotheses related to the four variables (information needs, subordinate acceptance, goal congruence, and subordinate conflict) in the model developed by Vroom and Yetton. The following provides the findings for each hypothesis, a summary of the major findings related to the four situational variables in the Vroom-Yetton model and the conclusions regarding the overall objective of the study.

> Hypothesis 1. The location and availability of information needed to solve a problem has no effect on an administrator's choice of decision making behavior. This hypothesis was rejected based on the results of the analysis.
>
> Hypothesis 2. The importance of subordinates' acceptance of a decision and the likelihood of subordinates accepting an autocratic decision has no effect on an administrator's choice of decision making behavior. This hypothesis was rejected based on the evidence from the analysis.
>
> Hypothesis 3. Congruence between the subordinates' goals and the organization's goals relative to a particular problem has no effect on an administrator's choice of decision making behavior. Based on the results of the analysis, this hypothesis was not rejected.

> Hypothesis 4. The likelihood of conflict among subordinates over proposed alternative solutions to a problem has no effect on an administrator's choice of decision making behavior. The results of the analysis provided evidence on which to reject this hypothesis.

1. The location and availability of information needed to solve a problem had a significant effect on the choice of decision making behavior by chief housing officers. This finding indicates that one should determine what information is needed and who can access that information before determining the best approach to use in reaching a decision on that particular problem. One implication is to use a less participatory decision making style when one has all the information needed to reach a high quality decision. However, as the results are further discussed, it appears that although this variable acts independently of any other situation variable in the model, the other variables may suggest a more participatory approach even when one has all the information needed to reach a high quality decision.

2. The importance of subordinates' acceptance of a decision and the likelihood of subordinates accepting an autocratic decision had a significant effect on the choice of decision making behavior by chief housing officers. With this factor, it appears that an administrator should first consider whether their subordinates' acceptance of a decision regarding a particular problem is really important for successful implementation of that decision. Secondly, this finding suggests the administrator then needs to surmise if the subordinates are likely to accept a decision reached by the administrator without consulting them. Again, the results indicated this factor affected one's

choice of decision behavior independently of any other factor. Yet one can surmise that even for those problems in which decision acceptance is not critical and it is assumed that the subordinates will accept an autocratic decision, the leader may still need to consult with subordinates if information to solve the problem can be obtained from the subordinates.

3. Congruence between the subordinates' goals and the organization's goals relative to a particular problem did not have a significant effect on the decision making behavior of chief housing officers. This finding suggests that chief housing officers do not report the congruence of their subordinates' goals with those of the organization as a factor in selecting a decision making behavior for a particular problem. It is possible that these administrators assume their subordinates do share the same goals as the organization and this is a moot issue in determining decision behaviors to employ in problem solving situations. This is the one aspect of the Vroom-Yetton model which is not supported by the responses of this sample population.

4. The likelihood of conflict among subordinates over proposed alternative solutions to a problem had a significant effect on a chief housing officer's choice of decision making behavior. Obviously, the choice of one's decision making behavior is affected by considerations of potential conflict among staff in reaching a decision relative to a particular problem. However, this research did not indicate whether high potentials for conflict suggest more or less participation in decision making by subordinates. One could surmise possibly, that in those situations which otherwise suggest a high degree of participation by

subordinates, the leader might choose to consult individually with staff rather than in a group setting. Again, the findings relative to this factor indicate that it acts independently from the other factors in affecting a chief housing officer's choice of decision making behavior

5. The gender of the chief housing officer did not significantly affect the choice of decision making behavior as reported by subjects in this study. The findings indicated that for both males and females in the study, the same situational factors (information needs, subordinate acceptance, and subordinate conflict) affected the level of subordinate participation they would use in various problems. In addition, neither the male respondents nor the female respondents indicated that the congruence between their subordinates' goals and those of the organization relative to a particular problem had any significant effect on their choice of decision making behavior.

6. The level of experience of the chief housing officers did not have a significant affect on their choice of decision making behavior. Separating the respondents into groups of those with five or less years of experience as a chief housing officer and those with more than five years experience allowed an analysis to be conducted to determine if this characteristic affected the level of subordinate involvement they encouraged for various problems. The results gave evidence similar to that of the gender analysis and the overall analysis. The factors of information needs, subordinate acceptance, and subordinate conflict significantly and independently affected one's choice of decision making behavior. At the same time, the factor of goal congruence again was not

a significant factor in either groups' choice of decision making behavior.

Conclusions and Discussion

Based on the findings of this research the following conclusions are presented.

1. Although some aspects of the Vroom-Yetton model are supported by this study, the level of congruence between a subordinate's goals and those of the organization was not perceived by chief housing officers as a factor in deciding whether to involve a subordinate in the decision making process. Therefore, the conclusion is that the Vroom-Yetton model does not describe the factors determining the manner in which college housing administrators involve their subordinates in making decisions.

2. The information needed to solve a problem, the likelihood of subordinate's acceptance of a decision, and the likelihood that subordinates might disagree on the decision were all determining factors for chief housing officers in deciding how much involvement to seek in making a decision. These situational variables appear independently to affect the chief housing officers' choice of decision style. The factors do not interact in their effect on chief housing officers' assessment of a situation.

3. Chief housing officers determine how much to involve their subordinates in solving a particular problem by the factors in each situation rather than using the same decision behavior for all problems. Very few of the respondents indicated they would use the same decision behavior regardless of the situational factors present in each problem.

4. The "Decision Style Inventory" provided statistical discrimination between the variables prescribed by the Vroom-Yetton model. This allowed for the study to focus on the effects of each factor present in the Vroom-Yetton model.

5. The responses of the chief housing officers agreed with the prescriptions of the Vroom-Yetton model 59% of the time. However, for those problems in which the model prescribed only one of the decision behaviors as appropriate, the chief housing officers agreed with the prescriptions of the Vroom-Yetton model only 34% of the time.

6. Chief housing officers sometimes perceive the importance of situational factors differently from each other. The analysis indicated that although 84% of the variability of responses was due to situational factors, 16% was due to individual differences among the respondents.

7. Determining the appropriate degree of subordinate involvement to encourage in problem solving is a complex process as evidenced by the results of this study. Although some theorists suggest expanded employee involvement in decision making, this study supports the suggestion that, in some situations, autocratic decision making is appropriate. Furthermore, this study indicates at least three situational factors should be considered in determining the level of subordinate involvement appropriate for various problems.

The results of this study and the conclusions reached from those results lead to various implications for college and university housing administrators.

First, the study implies that chief housing officers vary the level of subordinate involvement in decision making based, at least in part, on variables specific to each problem rather than using one preferred decision making style all of the time. This conclusion lends support for this and other research which has focused on the various contingency approaches to leadership and decision making.

Although this study focused on the variables encompassed by the Vroom-Yetton model, one can surmise that various other variables specific to particular situations might further affect an administrator's choice of decision making behavior. It was somewhat surprising that the variables tested did not appear to have any interactive affect on the chief housing officer's choice of decision making behavior. Previous research with the Vroom-Yetton model (1973) indicated that there were some interactive effects between variables. Indeed, one of the governing rules of the model assumes an interactive effect, which this research did not support.

The location and availability of information needed to solve a problem is a situational variable perceived as important by the chief housing officers in this study. In addition, the issue of subordinates' acceptance of a decision, autocratic or not, was perceived as an important situational variable by these housing officers. The likelihood that one's subordinates might be in conflict over alternative solutions to a problem was also perceived as an important factor in considering if and how to involve them in a problem solving situation.

It appears that chief housing officers do not perceive the congruence between their subordinates' goals and those of the organization in a particular situation as a factor in deciding whether to involve them in solving the problem. This suggests that although a subordinate may have personal goals that conflict with the goals of the organization relative to a particular problem, this goal conflict will not determine if that subordinate is or is not included in the decision making process. Another interpretation of this result is that these administrators assume their subordinates do share the organizations goals and therefore this factor is not considered in choosing a decision behavior for problem solving. However, the nature of the hypothetical problems used in this study may not have effectively demonstrated this particular variable.

In addition, when considering the gender or experience of chief housing officers, the findings parallel those for the sample population as a whole. While this is not conclusive evidence that males and females or experienced and less experienced administrators approach decision making the same way in all instances, the results of this study suggest that all of these groups consider similar factors in assessing the manner in which they will involve their subordinates in the decision making process.

While the research with this group of administrators did not fully support the Vroom-Yetton model of decision making, there was considerable support for the premise that certain variables in a situation are determining factors in choosing a decision making approach that considers the nature of employee involvement.

Implications for the Future

The results of this study point to the need for more research in the area of administrative decision making and the situational aspects of employee involvement. The following are limitations of this study and suggestions for future research on this topic.

1. This research was limited to the situational variables in the model developed by Vroom and Yetton. Future research could focus on other variables such as time factors, experience of the subordinates, and nature of the problems. Vroom and Yago (1989), in fact, have expanded the model to consider time as an important situational factor. Research on their expanded model might be useful.

2. This study was limited to chief housing administrators. Future research could include administrators from other student affairs departments and from departments outside of student affairs such as academic deans, institutional presidents, and business affairs administrators.

3. This study could be expanded to consider the differences among administrators related to age, type of institutions, or size of staff.

4. This study did not attempt to determine if one variable might be considered more important than another. Future research could focus on the weights placed on different situational factors by administrators.

5. Since the results indicated that three of the situational variables had effects on choice decision behaviors, future research could be done on a model that only includes those three variables in each of the hypothetical problems.

6. This research was conducted with abstract hypothetical problems. Future research could utilize a set of real problems as reported by a representative group from the research sample.

7. It might be useful to assess the preferred style of decision making used by individuals and then compare their responses on an instrument such as the "Decision Styles Inventory" to examine the differences between their preferred style and their approach to different problem solving situations.

8. Future research might gather data from an administrator's subordinates regarding the amount of participation they would want to have relative to particular problems. These data could be compared to the responses of the administrator to measure the congruence between the two groups.

9. A study could focus on types of problems and examine if the variables affecting the involvement of subordinates in the decision making phase varies for different types of problems. Types that could be examined might include problems regarding personnel, facility management, student behavior issues, or any number of different areas of concern.

10. Since there are various situational or contingency theories of decision making and/or leadership, future research might focus on the correlations of the different models. In addition, research could attempt to determine if one model is a better predictor of decision making behavior than the others.

The issue of employee participation in the overall administration of organizations is an important issue for future researchers. To date, the research has disagreed on the value of employee participation and the factors that determine the appropriate level of participation. Research leading to a decision making model that assures high quality decisions in a timely manner and that promotes subordinates' support and development might be a valuable contribution to administrators in any type of organization.

APPENDIX A
INSTRUMENT USED TO GATHER DATA

DECISION STYLES INVENTORY

This instrument is designed to assess the manner in which Chief Housing Officers choose to involve their staffs in reaching decisions under varying circumstances. To complete the instrument, you will be asked to choose one of five decision behaviors which most closely describes how you would reach a decision in each of the 32 scenarios described.

The 32 scenarios represent unique combinations of certain situational variables which this instrument is designed to investigate. As you read each hypothetical scenario, consider the information provided as a real diagnosis of a situation you might encounter in your administrative duties and select from the five available decision behaviors based on how you would choose to make a decision for each situation.

Before starting with the scenarios, please provide the information requested below to describe yourself, your position, and your institution. This information will provide additional data to use in determining if gender, size of staff or housing department, length of service, or type of institution has any bearing on the degree of staff involvement one encourages in decision making. Thank you very much for taking time to assist in this research.

****

Please circle the answers which describe you or your position:

1. I am a: female
male

2. My institution is: private
public

3. Our housing program has a student capacity of:
Under 1000
1000 to 2500
2500 to 5000
Above 5000

4. I have been a Chief Housing Officer for:
less than 1 year
1 to 5 years
6 to 10 years
more than 10 years

5. Full-time employees reporting directly to me:
less than 3
3 to 5
5 to 10
more than 10

After reading each of the scenarios below, select the decision method which most closely describes the approach you would take in reaching a decision for a situation which has those particular attributes present. The five decision behaviors from which you may choose are along a continuum from no participation by staff to full participation by staff and are described as follows:

A - You make an autocratic decision without input from staff.
B - You make an autocratic decision; your staff provide some information in response to your specific requests.
C - You make a decision after consulting individually with relevant staff.
D - You make a decision after consulting with relevant staff in a group meeting.
E - You chair a group decision making meeting of relevant staff in an attempt to reach agreement (consensus) on a solution.

****

SCENARIOS: After reading each scenario, circle the letter which corresponds to the decision method (above) you would most likely use in reaching a decision for that situation.

1. You have the necessary information to make a high quality decision. While your staff share the organizational goals to be achieved in making the decision, there is likely to be conflict among them over proposed alternatives. Effective implementation is dependent on their acceptance of the decision and they are not likely to accept an autocratic decision.

   CIRCLE ONE: A B C D E

---

2. You lack some necessary information and the requirements to get the information are not clearly defined (the problem is unstructured). Your staff share the organizational goals to be achieved in making the decision and there is not likely to be conflict among them over proposed alternatives. Effective implementation is dependent on their acceptance of the decision and they are likely to accept an autocratic decision.

   CIRCLE ONE: A B C D E

---

3. You have the necessary information to make a high quality decision. Your staff do not share the organizational goals to be achieved in making the decision and there is likely to be conflict among them over proposed alternatives. Effective implementation is dependent on their acceptance of the decision and they are not likely to accept an autocratic decision.

   CIRCLE ONE: A B C D E

A - You make an autocratic decision without input from staff.
B - You make an autocratic decision; your staff provide some information in response to your specific requests.
C - You make a decision after consulting individually with relevant staff.
D - You make a decision after consulting with relevant staff in a group meeting.
E - You chair a group decision making meeting of relevant staff in an attempt to reach agreement (consensus) on a solution.

****

4. You lack some necessary information but you know the sources of the needed information and requirements to get the information are clearly defined (the problem is well structured). While your staff share the organizational goals to be achieved in making the decision, there is likely to be conflict among them over proposed alternatives. Effective implementation is dependent on their acceptance of the decision, and they are not likely to accept an autocratic decision.

   CIRCLE ONE: A B C D E

---

5. You lack some necessary information and the requirements to get the information are not clearly defined (the problem is unstructured). While your staff share the organizational goals to be achieved in making the decision, there is likely to be conflict among them over proposed alternatives. Effective implementation is not dependent on their acceptance of the decision.

   CIRCLE ONE: A B C D E

---

6. You lack some necessary information and the requirements to get the information are not clearly defined (the problem is unstructured). While your staff share the organizational goals to be achieved in making the decision, there is likely to be conflict among them over proposed alternatives. Effective implementation is dependent on their acceptance of the decision and they are not likely to accept an autocratic decision.

   CIRCLE ONE: A B C D E

---

7. You lack some necessary information and the requirements to get the information are not clearly defined (the problem is unstructured). Your staff share the organizational goals to be achieved in making the decision and there is not likely to be conflict over proposed alternatives. Effective implementation is not dependent on their acceptance of the decision.

   CIRCLE ONE: A B C D E

A - You make an autocratic decision without input from staff.
B - You make an autocratic decision; your staff provide some information in response to your specific requests.
C - You make a decision after consulting individually with relevant staff.
D - You make a decision after consulting with relevant staff in a group meeting.
E - You chair a group decision making meeting of relevant staff in an attempt to reach agreement (consensus) on a solution.

****

8. You have the necessary information to make a high quality decision. Your staff do not share the organizational goals to be achieved in making the decision; however, there is not likely to be conflict among them over proposed alternatives. Effective implementation is not dependent on their acceptance of the decision.

CIRCLE ONE: A B C D E

---

9. You lack some necessary information but you know the sources of the needed information and the requirements to get the information are clearly defined (the problem is well structured). Your staff share the organizational goals to be achieved in making the decision and there is not likely to be conflict among them over proposed alternatives. Effective implementation is dependent on their acceptance of the decision and they are not likely to accept an autocratic decision.

CIRCLE ONE: A B C D E

---

10. You lack some necessary information and the requirements to get the information are not clearly defined (the problem is unstructured). Your staff do not share the organizational goals to be achieved in making the decision; however, there is not likely to be conflict among them over propose alternatives. Effective implementation is dependent on their acceptance of the decision and they are likely to accept an autocratic decision.

CIRCLE ONE: A B C D E

A - You make an autocratic decision without input from staff.
B - You make an autocratic decision; staff provide some information in response to your specific requests.
C - You make a decision after consulting individually with relevant staff.
D - You make a decision after consulting with relevant staff in a group meeting.
E - You chair a group decision making meeting of relevant staff in an attempt to reach agreement (consensus) on a solution.

****

11. You lack some necessary information but you know the sources of the needed information and requirements to get the information are clearly defined (the problem is well structured). Your staff do not share the organizational goals to be achieved in making the decision and there is likely to be conflict among them over proposed alternatives. Effective implementation is dependent on their acceptance of the decision and they are likely to accept an autocratic decision.

    CIRCLE ONE: A B C D E

---

12. You lack some necessary information and the requirements to get the information are not clearly defined (the problem is unstructured). Your staff share the organizational goals to be achieved in making the decision and there is not likely to be conflict among them over proposed alternatives. Effective implementation is not dependent on their acceptance of the decision.

    CIRCLE ONE: A B C D E

---

13. You lack some necessary information but you know the sources of the needed information and requirements to get the information are clearly defined (the problem is well structured). While your staff share the organizational goals to be achieved in making the decision, there is likely to be conflict among them over proposed alternatives. Effective implementation is dependent on their acceptance of the decision and they are likely to accept an autocratic decision.

    CIRCLE ONE: A B C D E

---

14. You have the necessary information to make a high quality decision. Your staff share the organizational goals to be achieved in making the decision and there is not likely to be conflict among them over proposed alternatives. Effective implementation is not dependent on their acceptance of the decision.

    CIRCLE ONE: A B C D E

A - You make an autocratic decision without input from staff.
B - You make an autocratic decision; staff provide some information in response to your specific requests.
C - You make a decision after consulting individually with relevant staff.
D - You make a decision after consulting with relevant staff in a group meeting.
E - You chair a group decision making meeting of relevant staff in an attempt to reach agreement (consensus) on a solution.

****

15. You have the necessary information to make a high quality decision. Your staff do not share the organizational goals to be achieved in making the decision; however, there is not likely to be conflict among them over proposed alternatives. Effective implementation is dependent on their acceptance of the decision and they are not likely to accept an autocratic decision.

    CIRCLE ONE: A B C D E

16. You lack some necessary information but you know the sources of the needed information and requirements to get the information are clearly defined (the problem is well structured). Your staff do not share the organizational goals to be achieved in making the decision; however, there is not likely to be conflict among them over proposed alternatives. Effective implementation is not dependent on their acceptance of the decision.

    CIRCLE ONE: A B C D E

17. You lack some necessary information but you know the sources of the needed information and requirements to get the information are clearly defined (the problem is well structured). Your staff do not share the organizational goals to be achieved in making the decision and there is likely to be conflict among them over proposed alternatives. Effective implementation is not dependent on their acceptance of the decision.

    CIRCLE ONE: A B C D E

18. You lack some necessary information and the requirements to get the information are not clearly defined (the problem is unstructured). While your staff share the organizational goals to be achieved in making the decision, there is likely to be conflict among them over proposed alternatives. Effective implementation is dependent on their acceptance of the decision and they are likely to accept an autocratic decision.

    CIRCLE ONE: A B C D E

A - You make an autocratic decision without input from staff.
B - You make an autocratic decision; staff provide some information in response to your specific requests.
C - You make a decision after consulting individually with relevant staff.
D - You make a decision after consulting with relevant staff in a group meeting.
E - You chair a group decision making meeting of relevant staff in an attempt to reach agreement (consensus) on a solution.

****

19. You lack some necessary information but you know the sources of the needed information and the requirements to get the information are clearly defined (the problem is well structured). Your staff do not share the organizational goals to be achieved in making the decision; however, there is not likely to be conflict among them over proposed alternatives. Effective implementation is dependent on their acceptance of the decision and they are not likely to accept an autocratic decision.

    CIRCLE ONE: A B C D E

---

20. You have the necessary information to make a high quality decision. Your staff do not share the organizational goals to be achieved in making the decision and there is likely to be conflict among them over proposed alternatives. Effective implementation is dependent on their acceptance of the decision and they are likely to accept an autocratic decision.

    CIRCLE ONE: A B C D E

---

21. You lack some necessary information and the requirements to get the information are not clearly defined (the problem is unstructured). Your staff do not share the organizational goals to be achieved in making the decision; however, there is not likely to be conflict among them over proposed alternatives. Effective implementation is not dependent on their acceptance of the decision.

    CIRCLE ONE: A B C D E

---

22. You lack some necessary information but you know the sources of the needed information and requirements to get the information are clearly defined (the problem is well structured). Your staff do not share the organizational goals to be achieved in making the decision and there is likely to be conflict among them over proposed alternatives. Effective implementation is not dependent on their acceptance of the decision.

    CIRCLE ONE: A B C D E

A - You make an autocratic decision without input from staff.
B - You make an autocratic decision; staff provide some information in response to your specific requests.
C - You make a decision after consulting individually with relevant staff.
D - You make a decision after consulting with relevant staff in a group meeting.
E - You chair a group decision making meeting of relevant staff in an attempt to reach agreement (consensus) on a solution.

****

23. You have the necessary information to make a high quality decision. Your staff do not share the organizational goals to be achieved in making the decision; however, there is not likely to be conflict among them over proposed alternatives. Effective implementation is dependent on their acceptance of the decision and they are not likely to accept an autocratic decision.

CIRCLE ONE: A B C D E

---

24. You lack some necessary information and the requirements to get the information are not clearly defined (the problem is unstructured). Your staff share the organizational goals to be achieved in making the decision and there is not likely to be conflict among them over proposed alternatives. Effective implementation is dependent on their acceptance of the decision and they are likely to accept an autocratic decision.

CIRCLE ONE: A B C D E

---

25. You lack some necessary information but you know the sources of the information and requirements to get the information are clearly defined (the problem is well structured). Your staff do not share the organizational goals to be achieved in making the decision; however, there is not likely to be conflict among them over proposed alternatives. Effective implementation is dependent on their acceptance of the decision and they are likely to accept an autocratic decision.

CIRCLE ONE: A B C D E

A - You make an autocratic decision without input from staff.
B - You make an autocratic decision; staff provide some information in response to your specific requests.
C - You make a decision after consulting individually with relevant staff.
D - You make a decision after consulting with relevant staff in a group meeting.
E - You chair a group decision making meeting of relevant staff in an attempt to reach agreement (consensus) on a solution.

****

26. You lack some necessary information and requirements to get the information are not clearly defined (the problem is unstructured). Your staff do not share the organizational goals to be achieved in making the decision and there is likely to be conflict among them over proposed alternatives. Effective implementation is dependent on their acceptance of the decision and they are likely to accept an autocratic decision.

CIRCLE ONE: A B C D E

---

27. You lack some necessary information but you know the sources of the needed information and requirements to get the information are clearly defined (the problem is well structured). While your staff share the organizational goals to be achieved in making the decision, there is likely to conflict among them over proposed alternatives. Effective implementation is not dependent on their acceptance of the decision.

CIRCLE ONE: A B C D E

---

28. You lack some necessary information and the requirements to get the information are not clearly defined (the problem is unstructured). Your staff do not share the organizational goals to be achieved in making the decision and there is likely to be conflict among them over proposed alternatives. Effective implementation is dependent on their acceptance of the decision and they are not likely to accept an autocratic decision.

CIRCLE ONE: A B C D E

---

29. You have the necessary information to make a high quality decision. Your staff do not share the organizational goals to be achieved in making the decision and there is likely to be conflict among them over proposed alternatives. Effective implementation is not dependent on their acceptance of the decision.

CIRCLE ONE: A B C D E

A - You make an autocratic decision without input from staff.
B - You make an autocratic decision; staff provide some information in response to your specific requests.
C - You make a decision after consulting individually with relevant staff.
D - You make a decision after consulting with relevant staff in a group meeting.
E - You chair a group decision making meeting of relevant staff in an attempt to reach agreement (consensus) on a solution.

****

30. You lack some necessary information but you know the sources of the needed information and requirements to get the information are clearly defined (the problem is well structured). Your staff share the organizational goals to be achieved in making the decision and there is not likely to be conflict among them over proposed alternatives. Effective implementation is dependent on their acceptance of the decision and they are likely to accept an autocratic decision.

    CIRCLE ONE: A B C D E

---

31. You lack some necessary information but you know the sources of the needed information and requirements to get the information are clearly defined (the problem is well structured). Your staff do not share the organizational goals to be achieved in making the decision and there is likely to be conflict among them over proposed alternatives. Effective implementation is dependent on their acceptance of the decision and they are not likely to accept an autocratic decision.

    CIRCLE ONE: A B C D E

---

32. You lack some necessary information and the requirements to get the information are not clearly defined (the problem is unstructured). Your staff do not share the organizational goals to be achieved in making the decision; however, there is not likely to be conflict among them over proposed alternatives. Effective implementation is dependent on their acceptance of the decision and they are not likely to accept an autocratic decision.

    CIRCLE ONE: A B C D E

Thank you very much for your participation in this study.

Code Number_______

Please return your completed inventory by Wednesday, November 2, 1988.

APPENDIX B
COVER MEMORANDUM TO PILOT STUDY PARTICIPANTS

September 21, 1988

MEMORANDUM

To: Participants in Pilot Study for Decision Making Research

Fr: Gene Luna

Here is the information you will need to participate in the pilot study regarding the Vroom-Yetton Decision Making Model.

Enclosed is:

- A brief explanation of the Vroom-Yetton model.

- The instrument to be completed by you.

- A list of questions I need for you to answer regarding your participation.

Please do not read any part of the instrument, including the directions, until you are ready to complete it. This is necessary since I need for you to report the actual amount of time it takes you to complete the instrument including the instructions.

Please do read the brief description of the Model and the Questions you will answer after you complete the instrument, prior to beginning the instrument. Your report of the time it takes to complete the instrument should not include any time you spend reading the Model's description or reading and responding to the questions about your participation in the pilot study.

If you have any questions about this, please call me (at office or home) before proceeding.

Please return your completed instrument and completed questions by Monday 9/26 if at all possible.

You have my deepest appreciation for your help with this project.

APPENDIX C
QUESTIONNAIRE FOR PILOT STUDY PARTICIPANTS

PILOT STUDY QUESTIONNAIRE

After you have completed and timed the Decision Styles Inventory, please answer the following questions:

1. How much time did it take you to complete the Decision Styles Inventory (please report your time to he nearest minute)?

2. Were the instructions (directions) on how to complete the "inventory" clear and understandable?

3. What changes in the instructions would be helpful to enable one to complete the inventory more easily?

4. What other changes in the format would you recommend be made to improve the "inventory"?

5. Please indicate here any other problems, concerns, or suggestions you may have about the "inventory."

Please return this questionnaire and your completed "inventory" by Monday, September 26. Thank you for your valuable assistance in the project!!!

Gene Luna

APPENDIX D
RESEARCHER'S INTRODUCTORY LETTER TO STUDY SAMPLE

October 7, 1988

Dear Colleague:

As a Chief Housing Officer, we are asking you to participate in a research project related to decision making in college and university housing administration. This study, based on the work of Victor Vroom and Philip Yetton, will investigate situational factors related to the amount of involvement staff have in the decision making process of persons in your position. The study has been endorsed by the ACUHO-I Research and Information Committee and your participation is very important for the success of the project. This research is being coordinated by Gene Luna at the University of Florida as part of his dissertation project.

As a participant in this research, you will be receiving a copy of the "Decision Styles Inventory" within the next few days. A pilot study indicates the average time to complete the inventory is 25 minutes. We would appreciate you completing the instrument and returning it in the pre-addressed and stamped envelope that will be provided. Your individual responses will be kept confidential. If you can not participate in this study, please notify us by October 14.

We appreciate your participation and cooperation and will provide you with a summary of the results of the study if you so request.

Respectfully,

James C. Grimm
Director of Housing
University of Florida

Gene Luna
Assistant Director
University of Florida

APPENDIX E
INTRODUCTORY ENDORSEMENT LETTER

October 6, 1988

Dear Colleague:

In a few days you will receive a survey instrument for research being conducted by Gene Luna of the University of Florida. Gene is doing this study in part to fulfill his requirements for his doctoral degree program. I am writing to you in my capacity as chair of the Research and Information Committee for ACUHO-I. I know that you receive a number of requests to participate in studies such as these and I would encourage your participation in this particular one.

The ACUHO-I Research and Information Committee is interested in this study and encourages your participation feeling that he results will benefit our organization and our profession. Please take a few minutes of your time to complete the questionnaire. I thank you for your time and interest in support of this research effort.

Sincerely,

Rita M. Moser
Chair, Research and
Information Committee
Russell Hall
Athens, GA 30602

APPENDIX F
COVER LETTER FROM INSTITUTE OF HIGHER EDUCATION

November 5, 1988

Dear Colleague:

Mr. Gene Luna is conducting a study of the decision making behaviors of chief housing officers in colleges and universities across the country. This study is sponsored by the Institute of Higher Education at the University of Florida and also has the endorsement of The Research and Information Committee of ACUHO-I.

You are invited to participate in this study. The study is examining the extent of staff participation and involvement in the decision making of chief housing officers in their daily work. The study, based on the work of Victor Vroom and Philip Yetton, will help determine the situational variables which are determining factors in levels of staff involvement during decision making.

Your participation in this study is very important. [The instrument took an average of only 25 minutes to complete during a pilot study.] Please complete and return the "Decision Styles Inventory" in the enclosed self-addressed, stamped envelope by November, 22, 1988. [Your individual responses will be confidential.] The code number on the survey is being used solely to register returned surveys.

I appreciate your participation in Mr. Luna's research. A summary of the results of the study will be provided to you if you so request at the end of the form.

Cordially,

James L. Wattenbarger
Director

JLW/ca

Enclosures

APPENDIX G
COVER LETTER TO CHIEF HOUSING OFFICERS

November 7, 1988

Dear Colleague,

We are asking you, as Chief Housing Officer, to participate in a research project related to decision making in college and university housing administration. This study, based on the work of Victor Vroom and Philip Yetton, will investigate situational factors related to the amount of involvement staff have in the decision making process of persons in your position. The study has been endorsed by the ACUHO-I Research and Information Committee and your participation is very important for the success of the project. This research is being coordinated by Gene Luna at the University of Florida as part of his dissertation project.

Enclosed is a copy of the "Decision Styles Inventory" which we ask that you complete and return. A pilot study indicates the average time to complete the inventory is 25 minutes. We have also enclosed a self-addressed stamped envelope to use in returning your completed inventory to us. Your individual responses will be kept confidential and the code number on the survey is being used solely to identify returned surveys.

It would be most helpful if you would complete and return the inventory to us by November 22, 1988. We appreciate your cooperation and participation in this study. A summary of the results will be sent to you if you so indicate on the completed inventory.

Respectfully,

James C. Grimm
Director of Housing
University of Florida

Gene Luna
Assistant Director
University of Florida

APPENDIX H
VARIABLES OF VROOM-YETTON DECISION MODEL

Attributes of the decision situation:

X-a >Information requirements

1 - Leader has necessary information to make high quality decision.

2 - Leader lacks some necessary information but sources of needed information are known and required search activities clearly defined. The problem is well structured.

3 - Leader lacks some necessary information and search activities are not clearly defined. The problem is unstructured.

X-b >Subordinate acceptance requirements

1 - Effective implementation is dependent on subordinate acceptance of the decision; such acceptance is unlikely to result from an autocratic decision.

2 - Effective implementation is dependent on subordinate acceptance of the decision; such acceptance is likely to result from an autocratic decision.

3 - Effective implementation is not dependent on subordinate acceptance of the decision.

X-c >Degree of subordinate goal congruence

1 - Subordinates share the organizational goals to be achieved in making the decision.

2 - Subordinates do not share the organizational goals to be achieved in making the decision.

X-d >Degree of expected subordinate conflict

1 - Conflict among subordinates over proposed alternatives is likely.

2 - Conflict among subordinates over proposed alternatives is unlikely.

APPENDIX I
CODED PROBLEMS FROM INSTRUMENT WITH MODEL'S PRESCRIPTIONS

DECISION STYLES INVENTORY - ATTRIBUTES & FEASIBLE RESPONSES:

1. Xa=1 (E)
Xb=1
Xc=1
Xd=1

2. Xa=3 (D E)
Xb=2
Xc=1
Xd=2

3. Xa=1 (D)
Xb=1
Xc=2
Xd=1

4. Xa=2 (E)
Xb=1
Xc=1
Xd=1

5. Xa=3 (D E)
Xb=3
Xc=1
Xd=1

6. Xa=3 (E)
Xb=1
Xc=1
Xd=1

7. Xa=2 (B C D E)
Xb=3
Xc=1
Xd=2

8. Xa=1 (A B C D)
Xb=3
Xc=2
Xd=2

9. Xa=2 (E)
Xb=1
Xc=1
Xd=2

10. Xa=3 (D)
Xb=2
Xc=2
Xd=2

11. Xa=2 (B C D)
Xb=2
Xc=2
Xd=1

12. Xa=3 (D E)
Xb=3
Xc=1
Xd=2

13. Xa=2 (B C D E)
Xb=2
Xc=1
Xd-1

14. Xa=1 (E)
Xb=1
Xc=1
Xd=2

15. Xa=1 (C D)
Xb=1
Xc=2
Xd=2

16. Xa=2 (B C D)
Xb=3
Xc=2
Xd=2

17. Xa=3 (D)
Xb=3
Xc=2
Xd=1

18. Xa=3 (D E)
Xb=2
Xc=1
Xd=1

19. Xa=2 (C D)
Xb=1
Xc=2
Xd=2

20. Xa=1 (A B C D)
Xb=2
Xc=2
Xd=1

21. Xa=3 (D)
Xb=3
Xc=2
Xd=2

22. Xa=2 (B C D)
Xb=3
Xc=2
Xd=1

23. Xa=1 (A B C D)
Xb=2
Xc=2
Xd=2

24. Xa=3 (E)
Xb=1
Xc=1
Xd=2

25. Xa=2 (B C D)
Xb=2
Xc=2
Xd=2

26. Xa=3 (D)
Xb=2
Xc=2
Xd=1

27. Xa=2 (B C D E)
Xb=3
Xc=1
Xd=1

28. Xa=3 (D)
Xb=1
Xc=2
Xd=1

29. Xa=1 (A B C D)
Xb=3
Xc=2
Xd=1

30. Xa=2 (B C D E)
Xb=2
Xc=1
Xd=2

31. Xa=2 (D)
Xb=1
Xc=2
Xd=1

32. Xa=3 (D)
Xb=1
Xc=2
Xd=2

APPENDIX J
FOLLOW-UP LETTER TO NONRESPONDING STUDY SAMPLE

November 30, 1988

Dear Colleague:

Recently, a "Decision Styles Inventory" was mailed to selected Chief Housing Officers at various institutions of higher education. The response to this study, sponsored by the ACUHO-I Research and Information Committee, has been positive.

According to our information, we have not yet received your completed "inventory." It is possible, of course, that it is currently en route to us. If so, please disregard this letter.

If you have not had the time to respond to the instrument you are encouraged to complete this copy. Your involvement will help us insure a representative perception of how decisions are made by Chief Housing Officers. It would be helpful if you could complete and return the "Decision Styles Inventory" in the self-addressed stamped envelope to us by Wednesday, December 12, 1988. Your individual responses will be kept confidential and the code number on the survey is being used solely to identify returned surveys.

We appreciate your cooperation and participation in this study.

Cordially yours,

James C. Grimm
Director of Housing
University of Florida

Gene Luna
Assistant Director
University of Florida

REFERENCES

Astin, A.W. (1977). Four critical years. San Francisco: Jossey-Bass.

Astin, A.W. (1985). Achieving educational excellence. San Francisco: Jossey-Bass. 145.

Bass, B.M. (1981). Stogdill's handbook of leadership. New York: The Free Press.

Bass, B.M., & Valenzi, E.R. (1974). Contingent aspects of effective management styles. In J.G. Hunt and L.L. Larson (Eds.), Contingency approaches to leadership (pp. 130-152). Carbondale: Southern Illinois University Press.

Bess, J.L. (1973). More than room and board: Linking residence and classroom. In J. Katz (Ed.), Services for students (New Directions for Higher Education, Number 3, Autumn 1973, pp. 37-50). San Francisco: Jossey-Bass.

Besse, R.M. (1973). A comparison of the university with the corporation. In J.A. Perkins (Ed.), The university as an organization. (pp. 107-120). New York: McGraw-Hill.

Blake, R.R.,& Mouton, J.S. (1962). The intergroup dynamics of win-lose conflict and problem-solving collaboration in union-management relations. In M. Sherif (Ed.), Intergroup relations and leadership. (pp. 94-140). New York: Wiley.

Chickering, A.W. (1974). Commuting versus resident students. San Francisco: Jossey-Bass.

Crookston, B. (1978). Student personnel - All hail and farewell! In J. Eddy (Ed.), College student personnel, development, administration, and counseling (pp. 27-36). Washington, DC: University Press of America.

Deegan, W.L. (1981). Managing student affairs programs: Methods, models, muddles. Palm Springs, CA: ETC Publications.

Duryea, E.D. (1973). Evolution of university organization. In J.A. Perkins (Ed.), The university as an organization. A report for The Carnegie Commission on Higher Education. New York: McGraw-Hill. 15-38.

Eble, K.E. (1978). The art of administration. San Francisco: Jossey-Bass.

Fenske, R.H. (1980). Historical foundations. In U. Delworth, G.R. Hanson, and Associates (Eds.), Student services: A handbook for the profession. San Francisco: Jossey-Bass. 3-24.

Fiedler, F.E. (1967). A theory of leadership effectiveness. New York: McGraw-Hill.

Field, R.H.G. (1979). A critique of the Vroom-Yetton contingency model of leadership behavior. Academy of Management Review, 4, 249-257.

Field, R.H.G. (1982). A test of the Vroom-Yetton normative model of leadership. Journal of Applied Psychology, 67, 523-532.

Fitzgerald, L.E. (1974). The future for college residence halls. In D.A. Decoster and P. Mable (Eds.), Student development and education in college residence halls (pp. 267-278). Washington, DC: American College Personnel Association.

Griffiths, D.E. (1959). Administrative theory. New York: Appleton.

Grimm, J.C. (1986). New ideas on facility management. Journal of College and University Student Housing, 16, 3-5.

Guthrie, J.W.,& Reed, R.J. (1986). Educational administration and policy. Englewood Cliffs, NJ: Prentice-Hall.

Heilman, M.E., Cage, J.E., Hornstein, H.A., & Herschlog, J.K. (1984). Reactions to prescribed leader behavior as a function of role perspective: The case of the Vroom-Yetton model. Journal of Applied Psychology, 69, 50-60.

Heller, F.A., & Yukl, G. (1969). Participation, managerial decision-making, and situational variables. Organizational Behavior and Human Performance, 4, 227-241.

Hersey, P., & Blanchard, K.H. (1977). Management of organizational behavior: Utilizing human resources. Englewood Cliffs, NJ: Prentice-Hall.

Hill, T.E., & Schmitt, N. (1977). Individual differences in leadership decision making. Organizational Behavior and Human Performance, 19, 353-367.

Hill, W.A. (1973). Leadership style: Rigid or flexible. Organizational Behavior and Human Performance, 9, 35-47.

House, R.J. (1971). A path goal theory of leadership effectiveness. Administrative Science Quarterly, 16, 321-338.

Hoy, W.K., & Miskel, C.G. (1982). Educational administration: Theory, research and practice. New York: Random House.

Ivancevich, J.M., Szilagyi, A.D., & Wallace, M.J. (1977). Organizational behavior and performance. Santa Monica, CA: Goodyear Publishing.

Jago, A.G. (1978). Configural cue utilization in implicit models of leader behavior. Organizational Behavior and Human Performance, 22, 474-496.

Jago, A.G., & Vroom, V.H. (1977). Hierarchical level and leadership style. Organizational Behavior and Human Performance, 18, 131-145.

Jago, A.G., & Vroom, V.H. (1982). Sex differences in the incidence and evaluation of participative leader behavior. Journal of Applied Psychology, 67, 776-783.

Kimbrough, R.B., & Nunnery, M.Y. (1983). Educational administration. New York: Macmillan.

Likert, R. (1977). Management styles and the human component. Management Review, 66, 23-45.

Maier, N.R.F., & Solem, A.R. (1952). The contribution of a discussion leader to the quality of group thinking: The effective use of minority opinions. Human Relations, 5, 277-288.

Maier, N.R.F., & Verser, G.C. (1982). Psychology in industrial organizations (5th Ed.). Boston: Houghton Mifflin.

March, J.G., & Simon, H.A. (1958). Organizations. New York: Wiley.

Margerison, C., & Glube, R. (1979). Leadership decision making: An empirical test of the Vroom and Yetton Model. Journal of Management Studies, 16, 45-55.

Mayhew, L.B. (1973). The Carnegie commission on higher education. San Francisco: Jossey-Bass.

McGregor, D. (1966). Leadership and motivation. Cambridge, MA: M.I.T. Press.

Millet, J.D. (1980). Management, governance and leadership. New York: AMACOM.

National Association of Student Personnel Administrators (1987). A perspective on student affairs. Washington, DC: NASPA

North, G. (1987). Advice to new housing directors: Pressures, internal and external - strategies for coping with them. The Journal of College and University Housing, 17, 3-7.

Pascarella, E. (1985). Influence of on-campus living versus commuting to college on intellectual and personal self-concept. Journal of College Student Personnel, 26, 292-299.

Peterson, W.E., Eddy, J., & Pitts, G.D. (1978). Historical perspectives of college student personnel work. In J. Eddy (Ed.), College student personnel, development, administration and counseling (pp. 1-14). Washington, DC: University Press of America.

Powers, D.R., & Powers, M.F. (1983). Making participatory management work. San Francisco: Jossey-Bass.

Pugh, D.S. (1984). Organization theory. New York: Viking Penguin.

Riker, H.C. (1965). College housing as learning centers. Washington, DC: American College Personnel Association.

Riker, H.C. (1974). The role of residence educators. In D.A. Decoster and P. Mable (Eds.), Student development and education in college residence halls (pp. 151-163). Washington, DC: American College Personnel Association.

Robinson, D.W. (1978). The student personnel function in American higher education. In J. Eddy (Ed.), College student personnel, development, administration and counseling (pp. 15-26). Washington, DC: University Press of America.

Sautter, J.A. (1988). ACUHO-I directory. Columbus, OH: Association of College and University Housing Officers - International.

Schuh, J.H. (1988). Residence halls. In A.L. Rextz and G.L. Saddlemire (Eds.), Student affairs functions in higher education (pp. 227-260). Springfield, IL: C.C. Thomas.

Simon, H.A. (1947). Administrative behavior. New York: Macmillan.

Tannenbaum, R., & Schmidt, W.H. (1958). How to choose a leadership pattern. Harvard Business Review, 36, 95-101.

Upcraft, M.L. (1989). Residence halls and campus activities. In M.L. Upcraft, J.N. Gardner and Associates (Eds.), The freshman year experience (pp. 142-155). San Francisco: Jossey-Bass.

Vickers, G. (1984). The art of judgement. In D.S. Pugh (Ed.), Organization theory (pp. 183-201). New York: Viking Penguin.

Vroom, V.H. (1976a). Can leaders learn to lead? Organizational dynamics, 4, 17-28.

Vroom, V.H. (1976b). Leadership. In M.D. Dunnette (Ed.), Handbook of industrial and organizational psychology (pp. 1527-1551). Chicago: Rand McNally.

Vroom, V.H. (1984a). A normative model of managerial decision making. In D.S. Pugh (Ed.), Organizational theory (pp. 256-276). New York: Viking Penguin.

Vroom, V.H. (1984b). Reflections on leadership and decision-making. Journal of General Mangement, 9, 18-36.

Vroom, V.H., & Jago, A.G. (1974). Decision making as a social process: Normative and descriptive models of leader behavior. Decision Sciences, 5, 743-769.

Vroom, V.H., & Jago, A.G. (1978). On the validity of the Vroom-Yetton model. Journal of Applied Psychology, 63, 151-162.

Vroom, V.H., & Jago, A.G. (1988). The new leadership: Managing participation in organizations. Englewood Cliffs, NJ: Prentice-Hall.

Vroom, V.H., & Yetton, P. (1973). Leadership and decision making. Pittsburgh: University of Pittsburgh Press.

Wolotkiewicz, R.J. (1980). College administrators handbook. Boston: Allyn and Bacon.

BIOGRAPHICAL SKETCH

Eugene Irving Luna III was born on September 27, 1949, in Eden (formerly called Leaksville), North Carolina. He attended public schools in Staten Island, New York, and Eden, North Carolina, graduating from Morehead High School in Eden in 1967.

Mr. Luna entered Roanoke College in Salem, Virginia, on a basketball scholarship in 1967 and graduated with a Bachelor of Arts degree in psychology in 1971.

After graduation from Roanoke College, Mr. Luna earned his real estate license and accepted a position with an Eden, North Carolina, real estate firm in 1971. During an eight-year career in real estate, Mr. Luna earned his broker's license, graduated from the North Carolina Realtors Institute, and served in various capacities with the Rockingham County Board of Realtors, including service as president in 1978. Beginning as a salesman with Wall, Realtors, Inc., in 1971, he was promoted to Director of Marketing and Personnel in 1973, and Vice President in 1976.

In 1979, Mr. Luna entered graduate school at Appalachian State University where he earned a Master of Arts degree in counseling and student development in 1981. While at ASU, he served as a Resident Director and Residence Life Coordinator. Mr. Luna accepted a position as Assistant Director of Housing at the University of Florida in 1983 and began his doctoral studies in 1984. Since 1989, Mr. Luna has served as Assistant Director of Housing at The University of Georgia.

Mr. Luna is married to the former Shelia Jean Bolick and is the proud father of two daughters, Rebecca Elizabeth and Emily Katherine, born in 1985 and 1989, respectively.

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

James L. Wattenbarger

James L. Wattenbarger, Chairman
Professor of Educational Leadership

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

C. Arthur Sandeen

C. Arthur Sandeen, Cochairman
Professor of Educational Leadership

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

James H. Pitts

James H. Pitts
Assistant Professor of Counselor Education

This dissertation was submitted to the Graduate Faculty of the College of Education and to the Graduate School and was accepted as partial fulfillmant of the requirements for the degree of Doctor of Philosophy.

August, 1990

David C Smith
Dean, College of Education

Dean, Graduate School